

Digitized by the Internet Archive
in 2021 with funding from
Duke University Libraries

Polyanyian Meditations

Polanyian Meditations

In Search of a Post-Critical Logic

by William H. Poteat

Duke University Press Durham

© 1985 by William H. Poteat

All rights reserved

Printed in the United States of America

on acid-free paper ∞

Library of Congress Cataloging-in-Publication Data

Poteat, William H.

Polanyian meditations.

Includes bibliographical references and indexes.

1. Polanyi, Michael, 1891- — Addresses, essays,
lectures. I. Title.

B945.P584P67 1985 190 85-20429

ISBN 0-8223-0542-9

190
P762
P861
1985
c. 2

*For my brother, Vangelis, who, like Orpheus,
causes rocks to move and dumb bronze to sing.*

Our acceptance of what is logically anterior is based on our prior acceptance of what is logically derivative, as being implied in our acceptance of the latter.

MICHAEL POLANYI

But couldn't we imagine God's suddenly giving a parrot understanding, and its now saying things to itself?—But here it is an important fact that I imagined a deity in order to imagine this.

Any logic good enough for a primitive means of communication needs no apology from us. Language did not emerge from some kind of ratiocination.

LUDWIG WITTGENSTEIN

A descriptive foundation for mathematics demands not the pursuit of perfection in the syllogisms of purified thinking but studies of the embodied calculus of such accomplishments as reaching for a doorknob and getting there on time.

DAVID SUDNOW

Something worth saying knew better than I did how it needed to be said.

WILLIAM FAULKNER

Acknowledgments

What follows is not a piece of scholarship such as conceivably could emerge from a protracted and solitary apprenticeship to books, although its indebtedness to the things I have read during nearly forty years in the academy is substantial and palpable. It issues rather from a sustained critical colloquy with three generations of graduate students set among a half-dozen or so “canonical” volumes in the context of our mutual search for the imagination’s way out of what Walker Percy has called the “old modern age.”

I, and my students in the measure to which they have truly joined the colloquy, have from the outset aspired to be radically critical of the Critical tradition of modernity, which is to say, we have undertaken to become postcritical.

Like any parasite, this essentially polemical convivium has battened on its host, hoping, not to weaken and eventually bring down but rather, modestly, to change the universities in which it was formed and by whose sufferance it has lived. At least those of us who have sustained this colloquy have ourselves hoped to be and have been changed.

Therefore even the least vocal and most equivocally committed participant in this long colloquy has, for me, had her part to play and must be, and is, herewith gladly acknowledged.

There are however some participants who deserve and herewith receive my hearty thanks by name: Professor Dale Cannon of Western Oregon State College, the late Professor W. A. Clebsch of Stanford University, Professor James Stines of Appalachian State University, and Professor David Schenck, Jr., of Lehigh College all read various drafts of the whole or of parts of the manuscript, raised trenchant queries, issued philosophical challenges, and gave valuable editorial suggestions. I thank them all and

entirely exculpate them of any complicity in its present shortcomings.

I also thank these others, each of whose relation to this project was different but no less essential to it:

Patricia Lewis Poteat, liberal with skepticism and love.

Benjamin M. Ladner, always at hand—in a thousand ways.

E. Maynard Adams and William Barrett. By their belief in the importance of what I was attempting, they served to overcome my own diffidence over the publishability of these *Meditations*. Could there be any greater act of collegial fidelity?

Tom Langford, colleague, collaborator, and friend of many years, supported me and supported the book in moments and in places which were decisive.

R. Taylor Scott, who suffered me to read aloud to him long passages from these pages, which are truly meant to be heard more than seen, interrupting me when I needed it, taking his own flights of implication when he could no longer contain himself.

A host of importunate students far too valuable to go unacknowledged, too numerous to be named.

Finally, Donald Weismann. It was while I shivered in my car one early January morning in 1958, waiting until the last possible moment to feed the parking meter before going to his course of lectures on “Nineteenth and Twentieth Century American Painting,” that I jotted on the back of an envelope the first intimations of these *Meditations* to come. And from that time until this present my mind has been energized and my heart enlarged by our friendship. I thank him for being “out there” for all these years.

Prologue

In November of 1968, in Athens, more than sixteen years into my apprenticeship to the thought of Michael Polanyi, I wrote an essay of barely five hundred words that I called “The Voice of Orpheus.” It quite took me by surprise: its demand to be written, what it said, the claim upon me of what it said.

The immediate occasion for its composition was an ecstatic afternoon spent with new wine and my new friend, the sculptor Evangelos Moustakas, amidst the wild thyme, in Greece’s November light, on the amiable gradients of Pentelis mountain.

I had come to Attica that fall for a sabbatical leave, fully armed with an articulated project of research and reflection all tidily derived from that conception of Greece and its culture with which literacy had endowed me. This imaginary world was that of Plato’s Dialogues, read in Greek, of Homer, of the tragedians, of the commentary upon Plato by the philosophic tradition of the West, which Whitehead, with some truth, has said all philosophy is; it was the world of the art historians, of fifth century sculpture and temples, not in situ, but abstracted into picture books; it was the world of Werner Jaeger, of Heinrich Schliemann and Sir Arthur Evans. A good post-Renaissance, post-European Enlightenment Westerner, feeling that for me coming to Greece was a genuine homecoming of the heart, I was ready warmly to embrace one of my progenitors and then to go to work. Very soon my Orphic dismemberment was to begin.

Before leaving home I had celebrated the appearance of a volume of sixteen essays that I had co-edited and that had been at least on the margins of my attention for nearly three years: *Intellect and Hope: Essays in the Thought of Michael Polanyi*. I had asked the contributors to this volume — philosophers, a sociologist, a literary critic, an artist and art historian, a

political scientist, a physicist, and a neurophysiologist—to apprentice themselves to Polanyi's thought and then to show the import for their own intellectual enterprises of what I took to be the radical criticism, in his *Personal Knowledge: Toward a Post-Critical Philosophy*, of the prepossessions of the European Enlightenment concerning the nature of human knowing and doing, and, by implication, of the architectonics of learned inquiry erected upon this Enlightenment foundation. As I had not expected, even the best of these essays were only equivocally successful: Polanyi was more radical than I could now imagine, after so many years of my own domestication in his thought; the imaginative feats of appropriation and application that were required of the essayists were not to be achieved simply on demand.

The co-editing of this volume was not merely the filial answering of an asking that my friendship with Polanyi had posited very deep in me—though this, at least, it surely was. Creature of Reform and Enlightenment that I was, and therefore “no prince and no Leviathan . . . made of infinite farewells . . . pruned of every gesture, saving only the habit of coming and going,”¹ through this apprenticeship to *Personal Knowledge* and to other philosophical writers as radical as but also as different from Polanyi as Kierkegaard, Wittgenstein, Merleau-Ponty, Hannah Arendt, I had for many years been trying to rend from this side the veil that separated me from myself. I could not have guessed, my projected program of research in shambles, that the reality of Greece would invite me to begin to approach myself from another side—one from which there was between me and myself no indigenous veil of Renaissance, Reformation, and Enlightenment.

My first encounter with the sculpture of Moustakas was an epiphany of the *other* of myself. Winding down the whitewashed steps, alley-ways, and streets of Plaka, the old village hunkering at the foot of the Athenian acropolis, one October dusk after watching the setting sun turn the marble of the Parthenon pink and then disappear to leave it suddenly leaden gray, I rounded a turn at just that moment—it now seems a work of providence—when a light was turned on inside the Diogenes International Gallery. There, suddenly visible, its dark bronze shape etched in silhouette against the wall, was a small equestrian statue of Alexander the Great. Anywhere else in the world, I imagine, I should not have noticed it at all. But my two months of increasing disarray had prepared me to *see*. I could not miss the lusty animation in the horse's neck nor the powerful dancing legs about to rive their brazen incarnation. In time I was to learn that the horse is an

ever-present vector of spirit in Moustakas's imagination; that in the heads of horses, in bronze, in marble, and in wash drawings, he would so thinly attenuate the animal in the horse as to allow spirit to burst forth into expression there; that its appearance in these obviously material equine embodiments was singularly dramatic and possessed of a peculiar gravity—even more than those artistic representations of spirit in the medium of more human metaphors; that, alienated one remove from our own human immediacy by these horses, spirit commands our attention with especial importunity.

What I felt at this epiphanic moment was that incarnate in this lightly dancing horse was something quite my own that I was not aware of having brought to Greece and that I wished above all else more fully to take in and claim as my own. The immediate task was to own the statue, *Alexander the Great*. And this I came to do. I also took in and claimed as my own this something, this *other* of my Enlightened self, which, unwitting, I had brought to the Diogenes International Gallery on this October evening. My Orphic dismemberment was begun, not at the hands of the Thracian women, but at the sight of a dancing horse.

How could this be so? Was it not that during the preceding days and weeks, in the National Archeological Museum and the Acropolis Museum, surrounded by hundreds of sculptures, massive and in marble, minute and in bronze, from all over the Greek mainland and from the Aegean islands as well, a deep ambivalence in my imagination was more and more intensified? To be sure, those pieces were not in situ in the temples, on the pediments where many once had stood. Yet their being present together had a massively cumulative effect, thereby creating a new kind of native environment, a *situ* in which they could again be themselves. And in this heavily charged ambience the clear continuity and discontinuity of the gloriously humane countenances—as we in the West take them paradigmatically to be—of fifth century gods and goddesses, alongside the “humanly” inscrutable and *other* beings behind the mysterious smiles and quadrifacial frontality of the archaic *Kouroi*, plumbed the ambivalence in me between my literately Enlightened self and my *other*, which these archaic smiles addressed. The import of all of this for me was compacted into the very particular brazen substance of Moustakas's dancing horse.

In the days that followed that October evening, as I came to know Moustakas and his work, as I watched him in his studio at his work, I came increasingly to sense that in his being, between his hands and what his hands wrought, there were no impediments of ambivalence: that his artis-

tic imagination—whatever his self-conscious “modernist” demurrers—was graciously inhabited and shaped as much by the *living reality* of the gods, goddesses, and heroes of antique myth as by the contemporary anguish of a Greek growing into manhood during the German occupation of World War II.

And so his work, thoroughly of our time, yet rooted in sources of inspiration and sustained by unreflected realities older than modernity—musical, deep in time—impinged upon my being like rain falling upon a desert of whose existence I’d not known. He had seen without self-consciousness the June War of 1967 in a mixture of biblical and classical images; he saw life’s ordinate promise and danger in figures of pregnant women, its energies, sublimities, and vulnerabilities in dancing horses, its dooms in the barely audible tread of the Erinyes pursuing Orestes, its glory in the Nikes, the power of its song and dance and of the harmony between ourselves and the earth’s rhythms vouchsafed to us through that song and dance in the descent and the ascent of Orpheus. With the sculpture of Moustakas, as with the poetry of George Seferis, one can say: “The Greek poet who draws on classical mythology in shaping the drama of his verse enjoys a large advantage over his similarly disposed contemporaries in England and America: he can evoke characters and settings that have mythological overtones with less danger of being merely literary in doing so, with less danger of arbitrarily imposing gods and heroes on an alien landscape—Tiresias on the Thames, or Prometheus in Pennsylvania, for example—since his own natural landscape is that to which these gods and heroes themselves once belonged and in which they still confront the mind’s eye plausibly.”²

By contrast, *our* history begins with Enlightenment, with Renaissance, with Reform. For good and for ill, we are creatures of criticism, revolution, self-inflicted amnesia. Not only have we turned our backs upon the past, tradition, inherited ways, the harmonious balance between man and nature. We have been tempted, as we have de-divinized nature, following our biblical inheritance, to divinize ourselves; and there has thus ensued a ripening flirtation with godhood, with infinity, restlessness, tumult, and madness.

Descartes in his *Discours de la méthode* consolidated the emerging hopes of his predecessors and drafted a program for our sensibility, saying: “By them [new principles of method] I perceived it to be possible to arrive at knowledge highly useful in life . . . and thus render ourselves the lords and possessors of nature. And this is a result to be desired, not only in order to

the invention of an infinity of Arts, by which we might be enabled to enjoy without trouble the fruits of the earth, and all its comforts, but also, and especially for the preservation of health.” Before the impetus of these hopes, which have become at times reason’s “sweet dream” of a heaven on earth, we have subjugated nature. And for three centuries we have found ourselves thrown back and forth in despair between thinking of ourselves as a “useless passion” in no way consanguine with the great inane nature that is merely our subject; and thinking of ourselves as mere animals whose greater animal complexity only renders the more meaningless our existence within the bosom of a nature without grandeur. Our “humanism” is very often the despairing offspring of this impiety. Our discarnate freedom has no place in the universe, our visible form recapitulates no cosmos, no breath of God shines in our faces. We are alternately bewildered and ashamed of our own image.

The humanism that is a child of the dark side of modernity—that of Pascal, Nietzsche, and Dostoyevski—is tinged with bitterness. There is a strain of self-hatred in our Western protests against dehumanization, a bad faith that shows itself more the more mordant and shrill the protest, as if we have to still with the sound of our own voices the deeper doubt that there is anything genuinely and intrinsically human to be defended. Who can behold Picasso’s enraged cry of pain in *Guernica* over the fate of innocence at the hands of mechanized brutality without feeling, nevertheless, the hint of human self-contempt that is also undeniably there. Our humanism keeps a mistress whose name is Nihilism.

Albert Camus explored this our madness in his “Helen’s Exile” and sought to recover health in the Greek ideal of limits. “Greek thought,” he says, “always took refuge behind the conception of limits. It never carried anything to extremes, neither the sacred nor reason, because it negated nothing, neither the sacred nor reason. It took everything into consideration, balancing shadow with light. Our Europe, on the other hand, off in the pursuit of totality, is the child of disproportion. She negates beauty, as she negates whatever she does not glorify. And, through all her diverse ways, she glorifies one thing, which is the future rule of reason. In her madness she extends the eternal limits, and at that very moment dark Erinyes fall upon her and tear her to pieces.”

Of course this Greece may have been the child of Camus’s nostalgia and despair. However, George Seferis, Greece’s Nobel laureate poet and, as diplomat, a familiar of Western capitals, Western values, and Western art, can speak with authority:

You see, we are a people who have had great Church Fathers, but we are now without great mystics; we are devoted to emotions and ideas, but we like to have even the most abstract notions presented in familiar form, something which a Christian of the West would call idolatry. Also, we are—in the original sense of the word—very conservative. None of our traditions, Christian or pre-Christian have really died out. Often when I attend the ritual procession on Good Friday, it is difficult for me to decide whether the god that is being buried is Christ or Adonis. Is it the climate? Is it the race? I can't tell. I believe it's really the light. There must surely be something about light that makes us what we are. In Greece one is more friendly, more at one with the universe.

During twenty years of teaching and study before my Greek adventure I had contended against the desiccation of spirit wrought in me by Enlightenment. The diagnosis of the nature and extent of the malaise had first been focused for me in my doctoral dissertation, *Pascal's Conception of Man and Modern Sensibility*. In this I entered the seventeenth-century cockpit from which modernity had emerged and opposed two of its great and characteristic thinkers: Pascal and Descartes. These two, equally modern men, were opposed to one another in their conception of human reason. In Pascal's own formula, Descartes was the advocate of *esprit de géométrie* while Pascal, himself a great mathematician, embracing the former, wished also to uncover less explicit rational powers in man which he called *esprit de finesse*. Here was shaped for me the problem that has occupied me now for more than thirty years: the nature of rationality and logic in an intellectual climate in which Descartes's legatees have prevailed and left us culturally insane.

I was thus well begun by this early essay in becoming a post-critical thinker. The discovery, in 1952, I think, of early "philosophical" writings of Michael Polanyi—the first, I remember, was "The Stability of Beliefs" in the *British Journal for the Philosophy of Science*, later to be incorporated, as a section, into *Personal Knowledge*—accredited and greatly enriched the context within which initially to obey my own intimations. After a 1955 visit with Polanyi in Manchester, full of excitement for us both, I took the train to Sheffield for an international conference, a typescript of the Gifford Lectures, later to become *Personal Knowledge*, under my arm. There were no seats to be had on board, so I stood in the aisle. There I propped the typescript on a stainless steel bar extending across the window at which I

stood and read with mounting excitement the section on “connoisseurship,” as the flooded English midlands rushed past, beyond the page from which I read. “Connoisseurship” was rich nourishment for my post-critical instincts.

Regular graduate seminars for sixteen years in *Personal Knowledge: Toward a Post-Critical Philosophy* made me something of an adept in Polanyi’s criticism of criticism—or so I thought. I had in fact gone about as far as one can in bringing the intellectual resources available to a child of Enlightenment to bear critically upon the Enlightenment as an exclusively intellectual task. My complacency was a characteristic product of the Enlightenment: I “understood” the thing to be done in primarily intellectualist terms; I supposed it could be significantly done without ever leaving the modern Western world, defined as Renaissance, Reform, and Enlightenment.

It was in my meeting with Greece and with Moustakas, for neither of whom Renaissance, Reform, and Enlightenment were events native to their stories, that the other of myself was profoundly and mindbodily* challenged and called forth by “emotions and ideas . . . even the most abstract notions presented in familiar form.”

It was an Orphic dismemberment. The intellectual categories upon which I had relied no longer fit. My whole being—my mindbodily being—was riven.

Moustakas, in his work and in his person, bore witness before me to a wholeness of being at once alien and familiar: alien as an other to my intellect; familiar as an exigent need of my total being. There we were together on Pentelis mountain and the voice of Orpheus demanded to be heard. And so—“a small essay for my friend, Vangelis, who, like Orpheus, causes rocks to move and dumb bronze to sing”—I wrote: “The Myth of Orpheus . . . is a representation more profound than any which reflection

*This coinage and variations upon it is one that I have found to be indispensable to the writing and even to my own reading of this essay. For it has provided me as I have written with the means for sustaining my grip, frequently awkward and precarious, upon my own central idea; and it has established for me as I have subsequently read the conceptual footing from which to explore that idea’s many implications. The repetitions of this word—even to the point of incantation, you may feel—is not therefore a self-indulgence, but for me a rhetorical necessity. After all, *everything else* in the conceptual ambience of this culture (and in me as its creature) testifies against my thesis. To mitigate the offense, if such it should prove to be, I appeal, with shameless presumption, to a perhaps too sanguine remark of Wittgenstein: “I still find my own way of philosophizing new, and it keeps striking me so afresh; that is why I need to repeat myself so often. It will have become second nature to a new generation, to whom the repetitions will be boring. I find them necessary.”

could give of the presence of order and of form in the cosmos; of the genesis of song and dance; and finally of the birth of human speech and intelligence. . . . Far then from being a surprise, it is on the contrary most congenial to an imagination like mine, enfleshed as it is in a rhythmically ordered body, that dumb rocks and trees should be perceived as resounding to the Orphic song, even as my own dumb body itself so resounds.”

Returning to Polanyi, I discovered equivocations, complexities—and profundities—I had not hitherto noticed. He was more difficult, more radical than I had been able to see or say when, in 1967, I had sat down to write the introduction to *Intellect and Hope*, “Upon First Sitting Down to Read *Personal Knowledge*. . . .”

In the spring of 1976, in the midst of a colloquy in my graduate seminar on *Personal Knowledge*, I interrupted to deliver an impromptu minilecture on Polanyi’s uses of the word ‘logic,’ a question to which I had not previously given explicit thought. To deflect the seminar’s attention from note-taking in order that instead the expectant faces of its members might be allowed to work their maieutic magic upon my only half-formed and emerging thought, I promised to commit to writing for future distribution what I felt I was about to say. A few days later I sat down to write the promised handout, beginning with a passage from page 160 of *Personal Knowledge*, supposing it would run to perhaps five legal-size mimeograph sheets. Three months and twenty-four thousand words later I had long since forgotten the handout and was well underway in the writing of *Polanyian Meditations: In Search of a Post-Critical Logic*.

I have called it *Polanyian Meditations*. This is because there is a sense in which it begins where my essay in *Intellect and Hope*, “Myths, Stories, History, Eschatology and Action: Some Polanyian Meditations,” ends. I wanted to claim this continuity. More importantly, having somewhat in mind, I suspect, Husserl’s *Cartesian Meditations*, I wanted to suggest by the subtitle of the early essay that it was not a contribution to Polanyian scholarship and interpretation—as Husserl’s was not a contribution to Cartesian. It was rather an attempt to think *out of myself*, under the influence of now deeply interiorized Polanyian motifs, about matters nowhere dealt with as such in *Personal Knowledge*. While there is much closer attention to Polanyi’s text in this longer sequel than in the earlier essay, the text is mainly a point of departure for moving toward a wide range of other things. My debt to Polanyi is profound and conspicuous. But, for good or ill, what follows is my attempt, subject to a long and exigent apprenticeship to him, to think some unthinkable thoughts of my own.

I have called these *meditations*, even though the form and rhetoric—which is an extraordinarily mixed bag—is not consanguine with most of the representatives of this genre. There are long passages in which the style is so dialectical and disputatious that the tranquil and irenic atmosphere natural to meditation seems remote. However, the writing is reflexive and involute, sentence by sentence, section by section, and this has been not so much deliberate as inescapable. Furthermore, there are really no breaks from beginning to end, only some rather artificial sectioning as my reflection has circled, doubled back, trying to discover in language and reflection the mindbodily roots of language and reflection. These characteristics of what follows seem to call for the designation “meditations”—albeit dialectical and agonistic.

What then are the central motifs that form the armature of these ever circling reflections? It is my view that rationality, that is, the “hanging togetherness” of things for us, and logic, that is, the articulated *form* of the “making sense” of things for us, is more deeply and ubiquitously, though inexplicitly, embedded in our ordinary thinking and doing than we are likely to notice. We fail to notice this because when called upon to *reflect* upon these facts we are likely to do so in the light of models—“a picture held us captive”—formed by critical philosophy, beginning with Descartes, which increasingly took mathematics and formal logic to be the preeminent (and usually the only) paradigms of the “hanging togetherness” of things and the “making sense” of things. I argue therefore that contrary to the subtly pervasive “picture” in the regnant Cartesianism of this culture that conceptually estranges thought about our minds from thought about our bodies, formalized rationality—mathematics and formal logic—derives from and remains parasitical upon the “hanging togetherness” and “sense-making” of our integral mindbodily rootedness in the as yet unreflected world and in our unreflected “thinkings” and doings in that world. This of course means that the mix among our uses of such concepts as ‘reason,’ ‘logic,’ ‘body,’ and ‘mind,’ to mention only some, will come to be drastically revised. For I claim that language—our first formal system—has the sinews of our bodies, which had them first; that the grammar, the syntax, the ingenuous choreography of our rhetorical engagement with the world, the meaning, the semantic and metaphorical intentionality of our language are preformed in that of our prelingual mindbodily being in the world, which is their condition of possibility. Mathematics is the ultimate achievement of our powers of abstraction and the medium of our ultimate access to the physical universe. It is therefore in it that our formalizing powers are

conceptually most alienated from their somatic roots. Thus, when mathematics becomes our dominant even if not sole paradigm of reason, the “picture” into which we easily fall to be held captive is that of a discarnate, i.e., the opposite of a mindbodily, being insofar as and when we are being rational. I contend therefore that when we speak of our world as an object or of our bodies as mere objects in the world, we use and can only use language generated out of a “reality” more archaic to our history than and very different from “mere objects in the world,” namely our *lived* and *lively* being in the world prior to speech, which still bears traces of its primitive rootedness in this prelingual setting. The only thing I find surprising about this claim is that it somehow seems at once outrageous and self-evident. But then there is much in what follows of which this can also be said.

This project of writing has, from its outset, had a life of its own, stretching backward to at least as long ago as that afternoon with Moustakas on Mount Pentelis. It has therefore mainly required of me humility and obedience. These written meditations then begin exactly where began what was originally to have been a five-page handout: with a question about Polanyi’s use of ‘logical.’ For me therefore to try to “manage” their shape for the sake of some Cartesian conceit would be to provoke the retribution of dark Erinyes.

Michael Polanyi begins his consideration of whether the premises of science can be known by posing the following question:

Can science be said to rest on specifiable presuppositions, be it on rules of correct procedure or on substantial beliefs about the nature of things?¹

The form of the question taken in context clearly implies that a scientist, alive, sentient, oriented in the world, and engaged in the activity of inquiry, is governed by a *practice*, a way of *doing* that may or may not be exhaustively reflected and identified. The very formulation of this implication suggests yet another puzzlement: when and to the extent that the elements of such a way of doing come to be reflected, yielding thereby explicit rules of procedure, what is it to which reflection has attended in doing so? Which is really to ask a bedrock epistemological question: what is reflection; how and by what means is it accomplished; what are our reflective instruments?

Polanyi's question also implies that this same scientist's inquiry is shaped, as he says, by "substantial beliefs about the nature of things" that equally may or may not be exhaustively reflected and identified; and this formulation suggests again the puzzlement over what it is to which reflection attends when it reflects and identifies these beliefs. In other words, we are led to ask, how are we to identify our substantial beliefs about the nature of things? —on its face, an odd-appearing question in the ethos of the Enlightenment where the answer usually would be self-evident: either one approaches inquiry free of any such beliefs; or one approaches it only in a state of lucidity about them! No third view seems to be afforded by our philosophic tradition.

The “picture”² we seem invited by Polanyi’s questions to contemplate is that of an inquirer whose very being is inextricably trammelled within the world’s body in the very musculature of his activity of inquiring, the activity *itself* shaped by many other things: by “rules of procedure” of at least some of which he is, perhaps, unaware and, what’s more, of which it may be logically impossible for him to become aware; and by “substantial beliefs about the nature of things” that may be equally elusive.

It is of course not being claimed that there are *never* any “rules of procedure” or “substantial beliefs about the nature of things” of which we are or at least can become explicitly aware—aware antecedent to and as the explicit directives for inquiry. The supposition is rather that there are some “rules of procedure” and “substantial beliefs” of which we are not and may not be able to become explicitly aware; yet that these “rules” and “beliefs” actually guide inquiry; and finally that, even if we have become aware of them, this awareness was arche-genetically achieved only after unreflected but productive *inquiry* and then only by our noticing in reflection after the fact what “rules” and what “beliefs” we recognize to have been implied in our actual *doing* of the inquiry. The very notion of unknowable rules of procedure is largely alien to our philosophic tradition regarding such matters. The introduction of such a conception into the interpretation of our feats of scientific knowing not only raises questions about methodology, especially about second-order accounts thereof; it raises questions, too, about the nature of logic, i.e., the form of the connectedness of things in the processes of thought, hence about the nature of mind—and by implication, about the nature of the body and its relation to the mind.

If then, there are “rules of procedure” and “substantial beliefs about the nature of things” of which we cannot or at least do not know and, in any case, may not, cannot, need not know prior to the beginning of inquiry, then two striking inferences may be drawn. First, the concepts ‘rule’ and ‘belief’ are doing duty largely unfamiliar in our philosophic tradition. Second, the “picture” of an inquirer’s way of being in the world in his activity of inquiry, classically formulated for the Enlightenment by Descartes’s *Discours de la méthode*, is implicitly under drastic revision. For that picture, taken strictly in terms of its own logic, is the paradoxical one of an inquirer divested of all previous beliefs, speaking and writing no language—hence without a culture—and armed before the fact with explicit rules of procedure (!), therefore disentangled from his own being in the world in his inquiring activity.³

As I appear to myself moiling amidst the words you have just read,

embrangled here in my own inquiry, immured it seems by the intractable stuff of my native language, with its complex history, its dense plaiting of verbal roots and its rich plexuses of metaphorical intentionalities, dragging me this way and that, and not suffering itself to be more than provisionally, tentatively, and partially unpacked, in order that I might reflect upon knowing, being, and reflection, *while I am in the very midst of my activity of knowing, being, and reflecting*, the Polanyian picture strikes me as much closer to the mark than does the Cartesian one.

But there is another picture in view of which we may establish our relation to Polanyi's question. We may depict a speaker-writer using words and in using them giving form to concepts in the texture of their overlapping-intersecting nexuses. The "logic" of this picture will lead us to ask: how is Polanyi using concepts such as 'assumption,' 'presupposition,' 'logic' ('logical'), 'belief,' 'valuation,' 'rule,' 'fact' ('factuality'), 'procedure,' and the like? We must, I think, assume that any attempt to construe their force in the terms laid down by the received philosophic tradition will confuse or mislead us.

Our interest in this question arises from the realization that Polanyi's *explicit* attack upon the regnant view of the nature of scientific knowing is less radical, less obviously "nontrivial" (in the received philosophical sense of this expression) and less broad in its general philosophical import than the "criticism" being accomplished in his often quite unwitting innovative use of the above concepts. It is in fact one of the achievements of *Personal Knowledge* that it intimates a different "logic," an alternative picture of our knowings and sayings, so that in its light we can appreciate how there can be this difference between what a writer *knows* he intends to say and what in a different sense he "intends" to say. And I do mean to claim that what he *knows* he intends and what he "intends" in a different sense are both his intentions, albeit the force of 'his' and 'intends' will vary in the two cases. Indeed it is one of the goals of these meditations to show that the consistent tacit logic informing even Polanyi's unwitting feats of conceptual innovation is a function of the specific mode in which he is mindbodily made present to the world as he actively shapes and is shaped by the language of the text of *Personal Knowledge*, himself sinewed into and innervated by its metaphorical bonds and vectors, toward the text's peculiar comprehension of its own constituent particulars. For example, to take a crushingly obvious case, an author appears very differently in his text if, say, "I have found" is substituted for "it is found."

This means that in explicitly examining the actual procedures of scientific

inquiry and *doing so while using the above concepts in novel ways*—concepts such as ‘logic,’ ‘belief,’ ‘valuation,’ ‘rule’—Polanyi is at the same time *tacitly fashioning an alternative picture*, albeit all unwitting, of the way a scientific inquirer, namely himself, sees his relation to the world as he brings that relation into reflection; and at an even deeper tacit level, an alternative picture of the way the inquirer is *in* the world “behind” his acts of inquiry is being expressed in the very reflection whose medium is *these* concepts used in *this* way. From this will perhaps begin to emerge an importantly different view of the way in which knowing and being are implicated with each other in the actual knowing and being of Michael Polanyi as these appear in the text of his book.

Now all this entails that Polanyi in writing the book *Personal Knowledge* is “borrowing,” “putting on,” “taking up,” relying upon the grammatical, syntactical, and semantical resources of the English language together with much else; that insofar as he *relies* upon these, he *assumes* them, they are *assumptions* for him.⁴ Further, we may say that in a different but nontrivially analogous way he *relies* upon, he *assumes*, that is, *takes as his own*, the explicit arguments that he formulates and that he in turn, having taken them as his own, assumes, that is, takes for granted, and relies upon these arguments as the ground of still others. And again, he states and in stating relies upon, that is, he assumes, takes for granted, lays claim to as his own the explicit premises on which these arguments are grounded. Finally, and most important for the argument at this juncture, he assumes, lays claim to, takes for granted, relies upon his own mindbodily being in the world *in the particular way afforded him by the metaphorical intentionalities of the very language that is the instrument of his reflection and in which he is entangled as he writes*. Tacitly, at the deepest conceivable level, Polanyi takes for granted, relies upon, assumes, dwells in his own way of being mindbodily in the world as he is linguistically shaped and entangled in the very words he is in the act of writing down. This is the ground of his whole enterprise. This is where he could not help but “stand” as he first sat down to write, pen in hand, with a particular working repertoire of English words at his beck.⁵

There ought to be nothing either unfamiliar or controversial in such a claim. You and I are not in the world in the way that a stone is. We are at once both distanced from and sinewed into the world as a stone is not. As we and our world are being reflected into being in us, we simultaneously both *have* and are *in the midst of* a picture, in my above sense.⁶ The structure of this picture is expressed in “language”: in the style of our movement; in the bearing and mien, the timbre and mood of either our

erect or of our recumbent bodies; in the pitch and the color of our voices; in the key, the tempo, and phrasing of our gaits; in the resonance and the hue of our glance; in the pace, the diction, weight, momentum, and metaphorical intentionalities of our speech.

All of us are experienced readers of this language. From it I can very often tell not only *where* you are and *how* you are; I also sometimes tell from it, most intimately, where and how *I* am, especially if at the moment I imagine and try to say that I am somewhere and somehow else; if for example I say: "I am not angry," but my knuckles are white, my facial muscles are tense, and my neck is red.

If then a man at once invariably both *has* and is *in the midst of* such a picture—if, that is to say, he both has and is in the midst of an audial picture in hearing Mozart's G Minor Quintet, a proprioceptive picture in practicing a motor skill, an olfactory picture in his orientation to an odorscape, a praxis in "knowing how to go on"—then his *knowing* where and how he is and his *being* where and how he is are radically connected: opposing sides of a single coin. The one is a reduplication of the other. Upon this connection he relies; it is the bedrock "assumption" of his existence.

Polanyi's own *implicit* "assumptions" then, including that "assumption" that is his own mindbodily grounding in the world as he generates and reflects the question at the head of this section, suggest that the structure of his way of knowing is a reduplication of the structure of his way of being in the world.⁷ For Polanyi then a theory of knowing must be inextricably implicated with a theory of being. And this is so since knowing, hence coming to know, hence seeking to know are all things we have been *doing* both before and after reflection because we are alive, sentient, and oriented in the world. Knowing (and this is not one but many sorts of things) is merely a special class of human activity subsumed under the larger class, viz., the complex repertoire of ways of humanly being in the world. Our account of our knowings must therefore express and retain this bedrock, irreducible logico-ontological reality else it will generate all manner of dualisms that in practice we will find to be quite incredible. And yet because this reality is itself the very radix of knowing-being or of being-knowing, it is metaproblematic, to use Marcel's coinage: that is, the ground of reflection is finally opaque to reflection.

My acts of seeking, coming to know, accrediting, holding, and upholding my knowledge in the world, then, reflect (indeed, quite exactly, they are reflections of, that is to say, they are "back-upon bendings" or "inward-

curvings toward”) my hitherto unreflected acts of living in the world.⁸

But before going ahead let me return to my reference above to Polanyi’s implicit “assumptions”; some of which, I have claimed, are embodied in therefore implied by what he *does* and are therefore grounded in his mindbody; another of which is the very actuality of his mindbodily being as such. In taking these up he “lays claim to” what he *does* and to what is therein implied; in being and in persisting in being alive, he lays claim to his own actuality.⁹

I have placed the word ‘assumption’ between quotation marks as a warning. Very often an assumption is taken strictly to be the sort of thing that is only “made” or “taken up” or “claimed” in the mind and therefore not in the mindbody; and what’s more, it is taken, once made, to reside *in* the mind explicitly, that is, in the manner of a proposition that we could readily utter. In other words, as our picture often has it, an assumption is *in* the mind and even if not in fact reflected, at least readily reflectable. The picture also has it that the move from “reflectable” to “reflected” does not depend upon a mindbodily act.

This warning seems appropriate, since we shall find that Polanyi places the word ‘assumption’ in such novel logical environments as to give it a logical force very different from that that it usually has in the received tradition.

Indeed it is well that we early on draw a further inference from my suggestion. This claim about the “assumptions” grounded in Polanyi’s mindbody as he is thinking-writing *Personal Knowledge* implies no less that my oriented mindbody in the world as I read it is simultaneously also making assumptions. As I am just now mindbodily oriented to my own emerging argument, reflecting it into being by means of the medium of my words that are in my “memory,” in my “mind,” in my “ear,” in my “hand,” and in the tip of the ball point pen with which I am just now writing down words in full view of my “eyes,” I am *now*, and was earlier when reading the words on page 160 of *Personal Knowledge*, mindbodily and therefore a fortiori in some sense *bodily*, making assumptions, by the very act of “taking up” existence in the world.¹⁰ In short it implies that my own mindbody is an assumption that I take up and rely upon and is “present” even if only tacitly in my words, for me as I write and for you as you read.

This further means of course that one of the theses of these meditations bears reflexively upon its own formulation on these pages in these words. As I articulate it in my words, embrangled in their metaphorical

intentionalities in virtue of which I both *have* and am *in the midst of* a picture, I at once make a comment upon this phenomenon and instantiate a particular case of it.

To be more concrete, all this implies for example that it would certainly be legitimate and sometimes may be logically demanded that we say of the structure of a physical skill that some of its particulars, whether gross or fine-grained, stand to others of its particulars in a way analogous in certain respects to that in which assertions stand to assumptions when the latter are the logical ground of the former—whether these are tacitly held or explicit.

Doubtless it will be rejoined that this is a mere analogy and not an illuminating one at that, since one cannot literally say: “Muscles make assumptions.” Indeed, so. Given the complacency that quite naturally attends our invocation of the too neat distinction between literal and figurative meanings¹¹ in a presumably familiar and unproblematic language game, and taking the bare words “muscles make assumptions” in the context that, without alternative directives, they will have by default in the commonsense discourse of modernity, it is difficult not to acquiesce in this rejoinder.

However, as we shall see increasingly in what follows, if what is under-way in Polanyi’s thought is a large-scale, even if rarely an explicit, rearrangement of concepts in order that we may think postcritically about our knowing and being, then we must discover how to fit the words “muscles make assumptions” into a new context, an alternative picture: one in which this conceptual rearrangement, hence this new way of thinking, will be allowed to occur.

Therefore I shall claim that as certainly as the component particulars of a motor skill do “hang together,” are perceived by us as “hanging together,”¹² and jointly mean that skill, they stand in “logical” relations with one another and with the skill as their comprehension. The elements of a skill are *integrated* in the skill. Their mode of hanging together and of meaning the motor skill that they jointly intend as their own comprehension is their logical relation; is indeed their logic. Surely if one remarks the marvelous disposition of the body’s several parts to the totality they jointly comprise, then to say: “There is a grand logic to the body” is not to say anything in the least problematic.

Finally, as such an integration this motor skill *supports*, can be the *ground* of the action that depends upon this comprehension. It can, in other words, be the “assumption” upon which the act is based. When therefore I

rely upon my bodily being in the world as the *conditio sine qua non* of my action, *it* is the assumption in which the act is grounded. My mindbodily being in the world, itself finally opaque to reflection, is my bedrock assumption; nor is this something given once-for-all, static, fixated.

For example, when I am stroking a tennis ball whose flight across the net I have picked up as soon as possible after it has left the strings of my opponent's racket, my whole body from my feet on the ground up flows in one seamless, integral arc through my calves, thighs, buttocks, back, shoulders, arm, and hand and into the racket head toward the point on the court where, as I follow these with my eyes, the flowing arc of the racket and the flight of the ball converge. What you will find immediately above on this page is not the *actuality* of "Poteat stroking a tennis ball." Rather (in relation to my act just now of stroking a tennis ball in fantasy, which fantasy depended upon words, if at all, in a most equivocal way) you will find the issue of a second-order act, viz., "a written description of Poteat stroking a tennis ball."

When I stroke a tennis ball my body and I are in the world, "behind" the seamless arc that ends in the impact of racket head and ball and in the follow-through: "behind" the seamless arc as the ground of its integration. But I am able to stroke the ball at all only because I have *disattended* from the way I am in the world "behind" the seamless arc in order to *attend* to the flight of the ball that I may strike it.

The tennis professional from whom I am taking a lesson attends instead to the way in which I and my body are in the world "behind" the seamless arc and to the way I dwell in that arc as I execute the stroke and follow-through. He has disattended from his own being in the world in order to attend to my being in the world. This *I* can do, if at all, only marginally while stroking a ball. Yet if my mindbody were not able quite seamlessly to integrate the tennis pro's explicit analysis of my stroke to my own motor acts without even vague maxims for how this is to be done, then tennis lessons would be impossible.

Now in the light of this example I want to make the perhaps extraordinary suggestion that between stroking a tennis ball, as just described, and formulating and asserting a theory or devising and stating a description of something in the world there are important analogies that should be remarked. And I would ask you to note immediately that what I have *just* done in asserting the preceding sentence is *itself* the act of "proposing a description of something in the world"—namely, *a description of the phenomenon of devising and stating a description of something in the world*. What I

have just done is to suggest that devising and stating a description, hence a fortiori any mindbodily act of speaking or writing down words, is like stroking a tennis ball! Indeed, in the very act of choosing the words I have just written down in order to shape the aforesaid description, I am already coming to see the relation between the words I am in the very act of writing down and the world they are being written down “about” in a way dictated by the words that are being written.

What are the implications of this proposal of mine? Had I suggested for example that devising and asserting a description of the world were like putting round pegs into round holes and square pegs into square—and, in saying this, obviously had in mind that the pegs were like my words and the holes were like the world I was trying to describe—you would be induced to think about the world and my (our) relation to it through language in a certain way; and to have one rather than another picture of my way of being in the world “behind” my words, since I have preferred to any other this particular way of describing my (our) relation to the world through language.

Inasmuch as I have claimed instead that devising and stating a description is like stroking a tennis ball, it should be obvious that in the very course of saying this I am both *having* and *being in the midst of* a very different picture of the world “behind” my uttered words. You may also readily guess the kind of pictures I would be likely to devise if you were to say: “Tell me, Poteat, how do you see yourself in the world?”

As, then, I rely tacitly upon the several parts of my body and upon my integral mindbody as a whole in order to produce the impact of racket head upon ball, so also do I rely tacitly upon the grammar, syntax, and semantics—the “logic,” if you will—of what I have just said in our mutual native language, in order then to go on to say what *follows* from what I have said (follows in both a temporal and “logical” sense) in the setting of what I am *at the same time* in the course of “saying,” viewed in some more global way; viewed, that is to say, from the standpoint of what the “whole” of our conversation is about. So also do I rely tacitly upon my mindbodily apprenticeship to and appropriation of the rules of a formalized system such as logic and mathematics in order then explicitly to deduce valid conclusions from their application. I know “how to go on” with them because I have been apprenticed to a practice: the practice, say, of construing the printed page of a book as a text to be read, not as a design—“Black on White,” say,—to be contemplated.

The tacit components upon which rely any inquiry into our acts of

knowing and an account thereof cannot themselves be explicitly known in that inquiry. The dependence upon tacit components of a given feat of explicit knowing that has issued from a given skeptical inquiry cannot itself be known explicitly in that skeptical inquiry. The tacit all but systematically vanishes before the process of making explicit. Obviously this kind of complexity exists in *accounts* of knowing, not in *knowing itself*, since the complexity of the reflected exists at all only for reflection. This puzzlement of mine (itself fueled by the Enlightenment dissatisfaction with anything short of total lucidity) over the relation between the tacit and the explicit and over the way to *express the nature of this relation* (as well as my present choice of this way to express it) is implicated with our inherited model of what it means for there to be a “logical” relation between the elements of a *given* discourse and a different relation between one order of discourse and another, “logically” heterogeneous one. Here it is a question of the many ways in which we might express how it is that things “hang together”: for example, to take but a few cases, we might say that “things” hang together and are perceived as hanging together in the way in which muscles do within the integration of our motor acts; they hang together and are perceived as hanging together in the way in which words in a sentence do; they hang together and are perceived as hanging together in the way that ground and figure do for gestalt psychology; they hang together, too, in the way that premises and conclusions do; and in many other ways as well. And when we undertake to express the way in which the elements in our feats of knowing hang together, it matters very much which of the above ways (or some other) is taken to be the paradigm for a second-order account of them. For example, the tension and intentionality embodied in the “hanging together” of ground and figure would seem a far better picture for reflectively expressing the structure of knowing, perceived as essentially an occurrence in time; whereas the kind of hanging together of premises and conclusions as embodied in a logical notation is, at least as this is depicted in the philosophic tradition, a model more suited to expressing the atemporal, “transcendentally deduced” relation among the elements of knowledge that is being described as an already “accomplished fact.”

I should then conclude epistemo-genetically (and also logically) that when we view our mindbodily being as an integral totality, embrangled in the temporal thickness of the world, it is the logico-epistemological sense of ‘assumption,’ the sense, namely, of the philosophic tradition, that is *derivative*, while it is the mindbodily sense that is radical, the sense that my

own mindbody is the ultimate “logical” ground and condition for me, the logical matrix in which the derived is rooted and from whose own intentional logic it has its meaning. In other words, our formal, reversible logic is reflected out of our mindbodies and therefore concepts such as ‘cause’ and ‘imply’ could mean nothing to us if we were not, anterior to their being made explicit in our acts of reflection, both motile and oriented mindbodies in the world.

My analysis here derives mainly from two sources. It draws first upon a “phenomenology” of my own blind reliance upon the mindbodily motoric rootedness of my sense of being myself an agent, hence of being myself a *cause* as the very basis and *conditio sine qua non* of my having come to achieve the competent use of the very word ‘cause,’ even in those logical settings where its sense would ordinarily be deemed to be most fully prescinded from any such reliance.

Let me amplify. What I have just claimed is pregnant with my most archaic perplexities and with the most fundamental assumptions that have given rise to them; some buried so deep in the history of my own mindbody as to be quite beyond the reach of reflection, hence of articulation; indeed, some of which, e.g., the several particulars that can be integrated to a motor skill and thus to an act, could not by definition achieve a standing in reflection. Yet how can I say this, for how can I “know” it? One of the root “assumptions” that lay buried until it achieved articulation—found in the preceding sentence concerning my archaic perplexities and the assumptions that issue in them—is the assumption that what the sentence asserts is true. I have given articulate form to a “claim” to “know” things and to “know” of their “logical” connectedness, some of which I am, in this very sentence, suggesting cannot be known. Therefore, if what is being claimed in this sentence is true, then at least part of what is claimed in this sentence *cannot* be true—namely, the part claiming that there are unknowable archaic “perplexities” and the “assumptions” that give rise to them in the history of my mindbody of the existence and the unknowability of which I can claim to *know*. But how can this be? The “logic” of this self-referential sentence, thus disclosed, seems to reduce my claim to absurdity. And yet this disclosure, while deepening my perplexity, does not weaken the hold of the original claim upon my mindbodily being. It in no wise impeaches for me my mindbodily confidence in the sense of the “logical” decorum of my initial utterance of the sentence as I wrote it down at the beginning of this paragraph. Indeed I want to say that the words of the uttered sentence, so inextricably trammelled with my mindbodily being as, relying upon it, I

write it out from within the history and contemporary being of the very mindbody upon which these words “reflect,” — the words of the sentence, I say — address themselves to a more primitive appreciation of meaning for my mindbody than the lucid unpacking of the sentence’s “logic.” Its words satisfy a more radical, a more archaically ontological sense of meaning and decorum in me. And in so doing, they express, embody, and bear in themselves the compelling sense of their own appositeness, a sense bordering upon necessity, which, as I read my own words, I find elicited from my mindbody that is reading them.

This surdity hopelessly embrangled and implicated at the radix of speech and reflection will not suffer itself fully to be reflected; but nevertheless it “shows itself.” This mute but eloquent oppugnancy will always appear, soon or late, so long as I begin, finally end, and, in the meantime, continuously vest my inquiry into meaning, sense, order, logic, and speech within my own lively and concretely actual mindbodily activities of shaping and discerning meaning, sense, order, and logic; and in speaking. However great may be the impetus in the practice of other methodologies for reflection to outstrip and disown its prereflective roots, to sublime itself and impute infinite flexibility and reflexivity to itself — subject to the gestalten and “logic” of different pictures, in my above sense — unfailing fidelity to that method that initiates and grounds reflection upon the nature and *arché* of reflection from within my actual mindbodily activities, including reflection itself, will return again and again to this surdity that, while oppugnant to reflection, is reflection’s ineffaceable source and antecedent. And throughout the above two paragraphs, in the involute and recursively reflexive discourse, I have undertaken faithfully to practice this method.

The radical truth about our being in the world is, then, simple, though it is not simply said; since it can be said at all only by means of a feat of estrangement from that simplicity. Only *speech as action*, our preeminent human power, which in second-order accounts of our doings and knowings can alienate us from ourselves and from itself, is, *as action*, powerful enough to disentrall us from these sometimes self-estranging pictures.

The “biography” of my mindbodily unity, no less than in the grammatical and syntactical hierarchies of language and speech, is rooted in a hierarchy of forms, structures, orders, systems that are more ancient than my reflective intelligence. It is these forms in harmony that give to my archaic mindbody, even long before it has moved for the first time in my mother’s womb, within which her beating heart rhythmically pumps the blood of life through my foetal body, forming itself toward my primal initiation into

the very foundation of my first and most primitive cosmos, its growing toward wholeness destined to become a person who will have discerned the meaning in human speech, since even before this it will have indwelt the beating rhythm of patterned and hence meaningful sound. These forms are for me, even *still* for *conscious, reflective, critical* me, archetypically the forms of measured time: tempo, beat, strophe, pulse.

There is then an archaic prejudice far older than I in my prereflective and unreflecting mindbody to indwell *all* form, meaning, and order in the world as the kindred of the first order I have known, the order of my mother's beating heart. And this prejudice that is older than I is nevertheless always present, even at this very moment, as the measured beat of my own heart, the pulsing of my own blood at my throat.

Even though therefore these archaic forms that give me a "body" before I am a knowing person do not know themselves, it is only by virtue of them that I am a mindbody that in time becomes the instrument of speech and hence the embodiment of reflected intelligence.

When therefore I make the claim that it is by means of the blind, mindbodily, motoric rootedness of a sense of being myself an *agent*, hence of being myself a *cause* that, learning language, I am given the prelingual infrastructure for acquiring the competent use of the very word 'cause,' I make it as the outcome of the practice of the phenomenology exhibited in the foregoing paragraphs.

Secondly, and in fact as itself a resource for the very doing of this phenomenology, my analysis draws, both tacitly and explicitly, upon the etymology of our language. For in this we can discover the inexplicable, that is, the not unravelable, implication, which means the "weaving together," of the radicals of words in our language with forms of our mindbodily activity. For example: one may take the implication (wovenness into) of the word 'imply,' used even in its strict formal logical sense, with the Latin *plicare*, to fold, *plectere*, to intertwine, to weave, and with the Greek *plekein*, to plait or weave, therefore to be implicated (woven) with the mindbodily-in-the-world activity of plaiting and weaving.

The methodology I here employ is more radical than the experimental one employed by Jean Piaget, who draws from his researches the conclusion that "eventually logico-mathematical operations are linked to the general coordinations of actions (unions, order, correspondence, etc.), and in the last analysis to biological self-regulatory systems but without the latter containing in advance all those constructions for which they merely constitute the starting point."¹³ One has to observe for example that Piaget, in

making the kind of sense he does of the emergence of logico-mathematical reasoning from the sensorimotor behavior of his subject children, however much he may also rely upon his experiments to do so, has *antecedently* depended all the while in his own mindbodily being upon the *prereflectively sensed primitive sensorimotoric rootedness of this connection*, which is itself neither justified by nor grounded in any experimental evidence, but rather *is the very existential ground, logical condition, and rationale* for conceiving of his experiments. For this reason therefore I claim that my methodology goes for what is truly archaic in the relations between “logico-mathematical operations” and “biological self-regulatory systems.”

To return now to the issue with which we began: if my claims about the assumptions underlying Polanyi's question concerning the specifiability of rules of procedure and of substantial beliefs about the nature of things are *prima facie* plausible, then we should not expect to be able to cash, in the text of *Personal Knowledge*, such concepts as ‘induction,’ ‘deduction,’ ‘logical anteriority,’ and the like at the familiar exchange rate long since established by the philosophic tradition.

For we have begun to see already how the range of uses of the concept ‘assumption’ has been greatly enlarged. An assumption is now seen to be at least the sort of thing that may indifferently be “entertained” by a “mind,” when it is either explicit or explicitable;¹⁴ by a mindbody, when, if at all, what is assumed can only be inferred — by you, by me who am myself this mindbody — from the manner in which the mindbody proceeds, what it does, what it is given to doing, by its way-of-being in the world; and finally, by a mindbody in the exercise of a skill.¹⁵ In short, we see ‘assumption,’ hitherto radically and discretely a logical and epistemological concept, become inextricably implicated, it would appear, with what in the tradition would generally be regarded as a theory or account of a mindbodily form of being — in other words, an ontological project *simpliciter*. The stated implication that an assumption with its hitherto mainly logical and epistemological sense may now be thought in different contexts as residing “in” a mind, “in” a mindbody, or “in” a body itself constitutes a claim no longer easily sorted out between ontological and epistemological kinds of claims. If this is the case, then one of the dominant paradigms in the tradition for the relations between epistemological questions *simpliciter* and ontological ones is no longer apposite to Polanyi's argument, though this is certainly not to suggest that the distinction ‘epistemology-ontology’ is without use. And it bears upon our elucidation of what this argument further portends to recall here that the picture whose logic has governed the

reflected analyses of the philosophic tradition has tended to abstract knowledge from the fact of its actual accomplishment *in time* in order that it might by means of a “transcendental deduction” be represented in terms of its logical (which is to say, according to that tradition, its *atemporal*) structure. Even though some in the tradition, for example, Spinoza, have tried to deal with Being and beings—in other words, to do ontology—as if their structure is best represented in terms of an atemporal logical model, ontological research has typically found it difficult to ignore the temporality of things. The exceptions have been on the other side in accounts of knowledge.

While it is no focal concern of his project to comment upon these issues, Polanyi consistently depicts the structure of knowing as always being inextricably situated even for thought among living, sentient, oriented, and therefore timeful knowers whose knowledge cannot be accurately represented as a logically (eternally) hierarchized “accomplished fact,” but rather as an achievement in time, any account of which must embody this temporality. This being his ground perception, a perception, I should add, that is a function of the picture that, as author, moving toward and through his inquiry he both *has* and is *in the midst of*, it is natural for him to hold that the structure of our way of *knowing* in the world reduplicates our way of *being* in the world—at least in the sense that an integral analysis of neither can be abstracted from time. Our *accounts* of our knowings must not be alienated from our knowings to the point of forgetfulness of them. The picture, in my above sense, of how we “stand,” of how as we reflect we are disposed to ourselves and to that out of which our reflection is generated and upon which it bends back, itself implicit in, implicated with the very language of our account, must not be one in which as knowers we are too much abstracted from the intentional activity of coming to know. The regnant Cartesianism fails to observe these limits.

In the same section of *Personal Knowledge* (hereinafter cited as *PK.*) now under scrutiny we see yet another daring conceptual innovation having some of the same import. Polanyi says: “The standards of intellectual satisfaction which urge and guide our eyes to gather what there is to see, and which guide our thoughts also to shape our conception of things . . .” (*PK.*, p. 161). The implication here is both plain and shocking. Even as my *thoughts*, it is suggested, grope their way toward meaning and intelligibility, obedient to standards of intellectual satisfaction whose accreditation and endorsement by me is implied in that very obedience, so also my eyes, even though subject to biochemical, optical, and physical

laws, as *organs of vision situated in my mindbody*, as, that is, the power of seeing situated in the world, grope their way toward *visual* sense by being subject to their own standards for the achievement of *that kind of sense*, which standards are not operative at the merely biochemical, optical, or physical levels.

As I have already claimed, traditional accounts of the structure of knowing are given to being accounts of knowing from which temporal heterogeneity is eliminated in favor of temporal homogeneity. In short, these accounts, by a kind of conceptual default, represent the structure of knowing as intelligible “in the instant.”

Some of the claims already made above and some yet to be made below concerning the operative models and metaphors—“pictures,” as I have been using this notion—in the philosophic tradition will appear to a reader to be so implausible on their face that I must risk some repetitiousness and also some possibly boring close scrutiny of Polanyi’s unease in the intellectual landscape within which *Personal Knowledge* was conceived and written as this is manifest in its text. The question will surely have arisen for the reader: could we really have been so captive to such pictures; and even if we have been, could there be any nontrivial philosophical consequences of this?

II

My analysis so far has focused mainly upon two matters. I have wished to say first that Polanyi has been using concepts with, on the whole, a familiar, standard use in the philosophical tradition, concepts such as 'rule of procedure,' 'belief,' 'assumption,' 'presupposition,' 'logic' ('logical'), 'valuation,' 'method,' 'fact' ('factuality'), and the like, but that he has been using them in such a way as to give them a different, perhaps very different, range of logical efficacy from the one they usually enjoy in the tradition; and that nevertheless he usually does this without realizing it. Secondly I have argued that there is always a picture of how one "stands," as one reflects, to that out of which one's reflection is generated and upon which it bends back, embodied in or expressed through the metaphorical intentionalities of the very particular juxtapositions of the words used, through, in short, one's reflective instruments; that the picture informing Polanyi's *Personal Knowledge* is different in a nontrivial way from that that generally informs writings in the philosophical tradition; and, finally, that Polanyi is not aware of this.

Let me now bring these conclusions to bear upon the exegesis of Section 6 ("The Premisses of Science") of Chapter 6 ("Intellectual Passions") of *Personal Knowledge* (pp. 160–71) where Polanyi is struggling to express the relation between rules of scientific procedure and scientific beliefs and valuations. He says: "The rules of scientific procedure which we adopt, and the scientific beliefs and valuations which we hold, are mutually determined" (*P.K.*, p. 161). How must I construe "rules of procedure," "adopt," "beliefs," "valuations" here? What does it mean in the setting of this sentence in the setting of this book to "hold" beliefs? Does one hold "valuations"? And what is the force of "mutually determined"?

I believe it not a serious oversimplification to say that for the philosophic

tradition the expression 'rules of procedure' would usually mean reflected or at least readily reflectable rules. For the tradition the locutions 'unreflected rule' and 'unreflectable rule' are contradictions *in adjecto*. If a rule is unreflectable, then how might it perform its function of directing the course of a lucid inquiry, laying out a path, a direction along which to proceed? How can it exercise sway over and govern procedure? How can it guide practice? How can one know where to go without a map?

If then we were to construe this sentence in the light of the philosophic tradition, we should understand 'rules of scientific procedure' as reflected, explicit directives such as one might be given in a community of practicing scientists. In such a setting, if one were to ask: "How do you go about doing what you do?" the retort might well be an impatient: "Here, read this book. It's all there." To be sure, such a construction leads to this puzzlement: If rules of procedure must invariably be reflected, that is, explicit, capable of being stated in a book; and *as* rules, namely, as directives for undertaking a given inquiry, they are necessarily explicit anterior to the inquiry that they are to direct; then how could science as a certain form of inquiry under the sway of certain rules and beliefs ever have gotten started at all? For before it was actually practiced, according to a practice, i.e., according to "rules," in accordance, that is to say, with what we *have been given to doing* "as a rule," someone would have to be on hand, say, Renatus Cartesius, to think out and explicitate a set of rules of procedure for doing science before ever it had been conceived. Indeed this appears to have been something like what Descartes supposed that he had done, sitting in his overheated room!

But this leads to an even more radical puzzlement. How did human reflection *itself* get started, were it not portended in the very *logos* and *arché* of man's prereflective mindbodily way of being in the world? Could it have been that God, being at hand, offered a few maxims about how to get going? Indeed, the full irony of the expectations and hopes of the Enlightenment tradition are most devastatingly revealed when we imagine ourselves offering to a preverbal child some procedural rules or even just some maxims for learning its native language.

The picture, in my above sense, expressed, if at all, only covertly but ubiquitously held by the philosophic tradition is, then, one that invites us paradigmatically to construe 'rules of procedure' as like written instructions, fully reflected and explicit; to construe 'the adoption of rules' as a reflected and lucidly made decision; to construe 'beliefs' as articulated affirmations to which I bear such a relation that it would be thought nonsensical for me

to reply to the question, "What are your general beliefs as to the nature of things?" by saying, "I don't know. I've never formulated them"; and, finally, to interpret the 'holding of valuations' as invariably an explicable intellectual act.

What then of the construction of 'determined' in the expression 'mutually determined'? Is determination here causal, is it logical, is it perhaps not exactly either, but something else? The tradition's view I believe is clear at this point. It would normally be inclined to take Polanyi as claiming that reflected rules of procedure determine and are determined by reflected scientific beliefs and valuations in the strictly logical sense of 'determine.'

Having claimed that certain scientific beliefs imply certain rules of procedure and certain rules of procedure imply certain scientific beliefs, Polanyi fails to notice that the picture of his own way of being mindbodily in the world, implicated with the metaphorical intentionalities of the reflective instruments by means of which *his* reflection is generated out of *his* mindbody and brought to bear upon *his* question, is nontrivially different from that governing the reflection of those in the tradition where 'belief,' 'rule,' 'imply,' 'procedure' have been used in a characteristically different way.

Polanyi's discomfiture with the form of his own argument shows itself therefore almost immediately. He says: "Beliefs and valuations¹ have accordingly functioned as joint premisses in the pursuit of scientific inquiries. But how exactly should they be defined in this relation?" (*PK.*, p. 161). The question that has seemed to arise for him is this: is 'premise' an appropriate concept here? And perhaps he wonders this because, unwittingly taken captive here by the tradition, he takes the *logical* relation between the *logical* antecedent and the consequent to be, by definition, a relation between two explicit, conceptually homogeneous and, in context, univocal terms, whereas he suspects that he is using 'premise,' 'belief,' and 'valuations' in a different way: that he is reflecting a different picture of how they come into play with one another, the picture, namely, of a scientist (Polanyi), alive, sentient, oriented mindbodily in the world, and engaged in the activity of inquiry, governed by practice, by a practice, by a way of doing, anterior to the formalization of explicit rules. Were this the case, then antecedent and consequent must be seen to have a temporal no less than a "logical" relation, because the picture now is one of something going on in time.

Then he appears to consider that perhaps his hesitations might be set aside, if we will but think of the premises of science as certain (statable)

general views of the nature of things and certain (statable) purposes that guide future scientific inquiry. Statable general views, embodied as they would be in the formal system of language, can have a logical relation to statable purposes, however this relation may be formalized. He says: "We might be inclined to acknowledge as [a given scientific inquiry's] premisses the general views and purposes bearing on a future scientific enquiry" (*P.K.*, p. 161).

But once again, unwittingly taken captive by the tradition, he remembers that 'premise' is usually a logical category. "[Therefore] it refers to an affirmation which is logically anterior to that of which it is the premiss" (*P.K.*, p. 161). One needs to ask immediately whether, as he writes these words, he is understanding 'premise' and 'affirmation' as *embodied* or *embodiable* in the formal system of language, which would enable him to take 'logically anterior' as being an anteriority that is always and *only* logical; or, we ask, is he rather understanding 'premise' and 'affirmation' in some other way? And if the latter, then is he understanding them as embodied or embodiable, but not in the formal system of language; embodied, say, in the lively mindbody of the inquirer in his inquiring activity? Or is it rather the case that 'premise' and 'affirmation,' subject to the sway of the operative picture of Polanyi's way of reflexively standing to the object of his own reflection, can sometimes have a primarily *logical* relation to whatever derives from or is grounded in it, sometimes a primarily temporal relation, but that they could never exclusively have just the one or the other relation. And may it not be that in the instant case of articulating the relations of 'beliefs,' 'valuations,' and 'scientific procedures' to the actual contemporary feat of inquiring into the nature of inquiry, the beliefs, valuations, and procedures held by him and expressed in the language of the quoted passage on page 161 of *Personal Knowledge* are related to one another and to his inquiring act simultaneously in both a logical and in a temporal sense: that there are beliefs and valuations embodied in the mindbody of an inquirer, such as is here being depicted, some of which are reflected, some of which are in fact unreflected but reflectable and some—namely, those embodied in our very living, tonic, and intentional mindbody—that are not reflectable? If this is so, the "logical" tension introduced into Polanyi's account of our knowings by the new valency bonds now governing the relations among the hitherto *strictly* logical concepts (as in the received tradition), such as 'premise,' 'affirmation,' 'logical anteriority,' insures that our knowings will, in our accounts of them, be represented as *proceedings*, as "something

going on,” rooted in the temporal thickness of our mindbodies in the world.

This construction upon Polanyi’s discomfiture seems to be further supported when he says: “Accordingly, the general views and purposes implicit in the achievement and establishment of a scientific discovery are its premisses, even though these views and purposes may no longer be quite the same as those held *before* the investigation was first seriously thought of” (*P.K.*, p. 161; emphasis in original). If I then interpret the description of “Poteat stroking a tennis ball” by this formulation, it would yield something like: the *assumptions* I make (are made by my mindbody) when I first see my opponent strike the tennis ball on the far side of the net are rapidly and subtly altered and adjusted in the course of the time between that moment and the one in which I meet the ball in its trajectory in order to return it. All of these “moves” are both logically and temporally adapted to their comprehensive end.

Other interpreters of the nature of scientific inquiry have not been at a loss to discover and explicitate what they believe to be the premises of science. If Polanyi after laboring so finds that it is only in “this paradoxical sense” that “we can envisage any premisses of science” (*P.K.*, p. 161), this is because the picture of his relation to the object of his investigation that he both *has* and is *in the midst of* and that is expressed through the metaphorical intentionalities of the very reflective instruments that comprise the text of *Personal Knowledge* is very different from that expressed in the texts of these other interpreters.

What we see in these pregnant passages is a contest in Polanyi’s imagination between the atemporal logical model to be found in the tradition and the very different picture informing the second-order description of his own acts of inquiry—which keep reiterating temporality, the sense of something going on in time.

The distinction between ontological questions, questions having mainly to do with the sorts of things there are and with their structure, on one hand, and epistemological questions, having mainly to do with the transcendently deduced structure of knowledge grasped in the atemporal logical instant, on the other, is being subjected to severe pressure by the enlargement in these passages of the range of logical efficacy of such concepts as ‘logic,’ ‘logical,’ ‘presupposition,’ ‘premise,’ ‘belief,’ ‘valuation,’ and ‘assumption.’ As we have already seen, ‘assumption’ may be used to characterize the disposition of a mindbody, ensconced in the temporal thickness of the world, towards the *telos* of its own acts of inquiry, even though it may be used in such a way that, in that use, no question in any

familiar sense can be raised about the explicitability of what is thus being assumed, either before or after the fact.

Polanyi, whether licitly or not, in fact talks in such a way as to lead us to believe that 'beliefs,' 'valuations,' 'assumptions,' 'premises' are "held" not merely by the "mind," whether reflected or reflectable, but also by the mindbody; and most surprising, perhaps, that the relation between an assumption in the mindbody (which is neither explicit nor, strictly, explicitable) and one in the "mind" (which may be explicit but is certainly explicitable) is a *logical* relation. This (I believe) unwitting conceptual innovation also makes it possible for Polanyi to make the philosophical move by which the *form* of being is claimed to be a reduplication of the *form* of knowing and vice versa. He says: "Man's skillful exercise of his body is a real entity that another person can know, and know only by comprehending it, and . . . the comprehension of this real entity has the same structure as the entity which is its object."²

And he continues: "It seems plausible then to *assume in all other instances of tacit knowing the correspondence between the structure of comprehension and the structure of the comprehensive entity which is its object.*"

At the risk of some redundancy, we must pursue this inquiry two steps further. Polanyi himself appears still to be ill at ease with what he has to say on the question of the "logical premisses of factuality." He says: "The logical premisses of factuality are not known to us or believed by us before we start establishing facts, but are recognized on the contrary *by reflecting on the way we establish facts.* Our acceptance of facts which make sense of the clues offered by experience to our eyes and ears must be presupposed first, and the process of making sense must be deduced from this afterwards" (*P.K.*, p. 162; emphasis in original).

It seems clear that in using the expression "the logical premisses of factuality" Polanyi means that these premisses are at once *antecedent* to—in an as yet unspecified sense—and are also the logical *conditions* for "establishing facts"; and that these can neither be "known" nor "believed" before the establishment of facts. The claim however that these premisses cannot, prior to the establishment of facts, be known or believed seems to retreat to the more traditional uses of these concepts from the position in which it made sense to speak of beliefs, valuations, assumptions, premisses being "held" not merely by the "mind" reflected or reflectable, but also by the mindbody. Surely, if the mindbody can "make assumptions," then it can "know" and "believe"—using 'know'

and 'believe,' to be sure, in ways as novel as but not more novel than the new use of 'assume.'

On the face of it, Polanyi's use here of 'logical,' 'premise,' 'know,' and 'believe' leads us to take their force to be quite unproblematically traditional. When he uses 'logical premises,' one's impulse is to take him to mean what can be expressed in propositions and is therefore explicit; when he uses 'know' and 'believe,' we take him to mean propositions concerning which, being explicit, questions as to their truth or falsity could arise. This would be a familiar use of these concepts.

When however he goes on to talk about logical premises of factuality that *cannot* be known to us or believed by us *before* we start establishing facts, our above prima facie construal of his view of the relation between premises and facts becomes suspect. This is not the way we are accustomed to talking in the epistemology of the tradition. We do not normally think of facts as having *logical* premises, or indeed *premises* of any sort. In this tradition if we wish to remark the "hanging togetherness" of facts, we are much more likely to do so in terms of the concepts 'cause' or 'law.'

Polanyi, as we have already seen, seems to hold that the (unknown) logical premises of factuality are at once temporally antecedent to and are the logical conditions for the "establishing [of] facts." Typically, I think, an inexplicit or unexplicable *logical* antecedent would be taken to be a contradiction *in adjecto*. Usually the *logical* relation of antecedent and consequent is by definition, as *logical relation*, one in which both terms are explicit.

Of course we can easily take these words to be making a more ordinary and modest sort of claim: that we have already "established" all manner of "facts" about the world around us—indeed, as the condition of our having survived to become philosophers—long before we know how it is that we have come to do so, even longer before we begin to entertain questions as to how we do so. But then if this is all that Polanyi meant to say, why then did he not say it? Or more to the point, if this is all he meant to say, then why did he bother to say it?

Are we then to conclude that Polanyi is simply confused and that had he really understood what he meant, he would not have talked about the logical premises of factuality? If so, then he is deeply and intransigently confused. For he continues to use the same language in the rest of the paragraph: "We do not believe in the existence of facts because of our anterior and securer belief in any *explicit* logical presuppositions of such a belief" (*PK.*, p. 162; emphasis added). Does he here imply that we have an anterior belief in *inexplicit logical* (?) presuppositions that, even though

unformalized, stand to their consequents not only in the relation of *temporal* anteriority, but in that of logical “anteriority” as well?

He continues: “On the contrary, we believe in certain explicit [I should want to say “explicitated”] presuppositions of factuality only because we have discovered that they are implied in our belief in the existence of facts” (*P.K.*, p. 162). Here the concept ‘implication’ is used to express the “hanging togetherness” of the hitherto unexplicitated presuppositions of my saying, “I believe in (these) facts” from the fact of which utterance I may then explicitate by an act of inference what is presupposed (as a condition) of my saying this. And suddenly it becomes clear that for Polanyi the condition that is presupposed by my saying, “I believe in (these) facts,” is bound “ontologically” to *my act of saying*, bound, that is, to my mindbodily being in the world. In short, the (logical) “condition” for the voicing of the words “there are (these) facts” is my existence as a speaker existentially exposed to the actuality of the world; and the connection between the utterance “there are (these) facts” and their condition, inferred from their utterance, is one of (logical?) implication. But equally, as he would want it, the condition is no less *logically* bound to that saying in the now extended sense of ‘logical’: in short, the “condition” for the words “there are (these) facts” having a sense is the existence of the rules, both tacit (as embodied in our practice) and explicit, that make language use possible.³ It is now not too much to say, as I have earlier suggested we might, that this innovation in the use of ‘logic’ could lead Polanyi to think of our muscles and their integration to a motor feat as the premises of that feat.⁴

III

It may be easy enough to concede the *prima facie* plausibility of the argument to this point, to concede that there is indeed a curious skewing of the uses of the word 'logic' by Polanyi. One may readily grant that temporal anteriority and logical anteriority are not reducible to one another and that Polanyi, in the course of his argument above, has conflated these two uses, conflated them in such a way as to mix what have been taken as primarily "epistemological" issues with "ontological" ones, allowing 'logic' to be applied not only to the structure of an explicit argument reflectively entertained by our "minds," but no less to the temporal form and structure of our mindbodily interaction as knowers with the world we find ourselves in.

But having made this concession, one may be left to wonder why so much should be made of it. Polanyi, it will be admitted, does resort to these rather heterodox uses of the concept of logic. But his resorts to these uses are all in the service of making a perfectly obvious and uncontroversial claim: that the condition for the voicing of the words, "there are facts," is the existence of a speaker, existentially exposed to the actuality of the world; and that the condition for the speaker's words having a sense is the existence among us of rules, both tacit, as embodied in our practice, and explicit, that make language possible. Who however has denied or would deny this?

To be sure, Polanyi has resorted to a rather ponderous method for making these claims—claims, as we have seen, much more gracefully stated in the most commonplace of language. But once it has been shown that the import of these passages of rather tortured discourse is the modest and uncontested one we have disclosed, the ostensible philosophical dangers of Polanyi's dissident uses of the word 'logic' are seen

to be modest at worst and their purported ingenious novelty trivial at best.

These are of course questions that inevitably arise for us. Creatures of the Cartesian Enlightenment that we are, immured in that picture of our situation in the world as knowers, these questions are native to our wit. Insofar as we both *have* and are *in the midst of* this picture, we tend to believe that only that knowledge is nontrivial, and therefore worthy of “philosophical” notice, that has been rendered explicit as the outcome of a systematic skeptical inquiry into and description of instances of knowledge, governed by explicit *regulae*. According to this picture, which depicts our relation to our mindbodily being in the world and even to our acts of reflection as if we were pure, discarnate minds, only that qualifies as genuine and significant knowledge that issues from the lucid act of obeying explicitly stated, hence reversible, “rules for the direction mind.” In this *picture* the achievement of (objective) knowledge begins with a reflective suspension of all the “logical,” “ontological,” and “temporal” antecedents of reflection itself—not that Descartes was so simpleminded as to believe so. He did after all hold fast even in his skeptical reflection to his unreflected command of French and Latin as the sole bond between the reflectively isolated *cogito* and his own actual mindbodily being in the world, so that he was able, when the time came to do so, uninhibitedly to assert *je pense, donc je suis* and *cogito, ergo sum*. The forgivable oversight of Descartes has become the amnesia, if not indeed the repression, of generations of Cartesians, pertinaciously held captive by their picture of the noetic situation. The logical, ontological, and temporal antecedents of reflection are reflectively suspended and are thereafter regarded as obvious and therefore philosophically trivial, condemned to live less than a half-life in the shabby precincts of mere “common sense,” not part of our skeptically induced, hence philosophically important, second-order accounts of our knowings. And there is a profound resistance to—a conceptually induced incapacity for—the recovery and rehabilitation of these antecedents of reflected knowledge for our actual accounts of knowing. For a fortiori, any antecedent “data” upon which our reflection acritically relies as the very condition *sine qua non* of all such skeptical and explicit inquiries can themselves never be discovered as the fruit of such an inquiry. As we have seen, it is the nature of reflection, under the sway of our regnant picture, systematically to outrun its own antecedents. And when reflection, to which its antecedents are deemed to be irrelevant, is taken as the very paradigm and model of knowledge, this natural tendency will be exaggerated and all such antecedents will come to be, *in principle*, bracketed out

and devalued epistemologically. Recovering and revaluing these in the setting of the regnant modern picture is a well-nigh impossible task.¹

In *Personal Knowledge*, Polanyi is integrating the existent knower, caught up in his acts of coming to know and of making acknowledging affirmations of this, into his *account* of knowing. When therefore he resorts to the tortured equivocations with the concept of logic in the passages we have examined, it is in face of what I have called the conceptually induced incapacity for the recovery and rehabilitation of the antecedents of reflected knowledge in our accounts of knowing. In the meantime, we can be grateful that we could not have paid any heed to our sometimes baroque methodological prolegomena as actual guides into inquiry.

Earlier I suggested, in view of the apparent implications of Polanyi's argument, that it might be logically demanded that we say of the structure of a physical skill that some particulars of it stand to others in a way analogous to that in which assertions stand to the assumptions that are their logical ground. In other words I explicitly suggested that there are illuminating analogies between the "logic" of a skill and the "logic" of propositions; that 'logic' may be applied not only to the structure of an explicit argument reflectively entertained by our "minds," but no less applied to the temporal form and structure of our mindbodily interaction with the world we find ourselves in.

By now, perhaps, the argument has made such a claim seem less outlandish. Even so, it is well to remember that it is only after a good deal of initial skepticism about the rational decorum of inflecting the uses of 'logic' in these ways that we have conceded the legitimacy of thinking of our muscles and their integration to a motor feat as the *premises* of that feat. And this was made possible precisely by taking seriously Polanyi's heterodox uses of the word 'logic'; by unpacking these uses and by showing that the awkward discourse is necessitated by a regnant picture of reflected knowledge that is under attack; and, finally, by showing that his dissident uses of 'logic' comprise one of the rhetorical strategies at his disposal in this attack, however unbeknownst to him it may have been.

To summarize then, Polanyi is not only insisting upon there being a temporal and *ontological* relation between antecedent and consequent—between believing in facts and "believing" in the "presuppositions" of believing in them after we have inferred, after the fact, what these are. He is equally insisting upon there being a logical relation between them. The "presuppositions of factuality" are prereflectively given as the whole hierarchy of "beliefs," "valuations," "assumptions," "premises," and the like,

grounded in the temporal density of our mindbodily tonicity and motility upon which we rely in order to attend from it and them to the object of our inquiry.² We must then add that all this happens because it is implied by—that is, woven and plaited into the warp and weave of the picture that Polanyi simultaneously both *has* and is *in the midst of*—and is embodied in the “logic” of the instruments of his own reflection found in the text of *Personal Knowledge*.

Polanyi appears to wish to put this whole puzzle behind him once and for all when he says, speaking here of the problem of axiomatization in mathematics: “When certain undefined terms, axioms and symbolic operations are established as the logical antecedents of mathematics, these are based on the prior assumption that mathematics is true. *Our acceptance of what is logically anterior is based on our prior acceptance of what is logically derivative, as being implied in our acceptance of the latter*” (*P.K.*, p. 191; emphasis added).

The fascinating and bewildering interplay in this passage between the temporal and the putatively strict, logical senses of ‘logical,’ ‘anterior,’ ‘prior,’ ‘derivative,’ and ‘being implied’ deserve and will receive some extensive unpacking later on. In order to prosper this end I shall then suggest what I believe to be the operative though tacit model or picture of the formal connectedness of things, for logic, if you please, that governs Polanyi’s imagination.

For the present, it should suffice to reiterate and summarize some of what has been said to interpret the meaning of the phrase, “to represent the structure of knowing in the instant.” I have observed that accounts of knowing generated out of the philosophic tradition have typically been explications of the logical—in the sense of atemporally hierarchized—structure of *knowledge* as opposed to dynamic knowings. Polanyi’s *Personal Knowledge* by contrast is an account of our mindbodily activities of seeking, coming to know, making acknowledging affirmations, and upholding our knowledge. This simple contrast so boldly stated may well seem quite without philosophical significance. Could it really be that our notorious puzzlements over objectivity as opposed to subjectivity, body as opposed to mind, and all the rest of the fateful and falsely drawn dichotomies of modern thought are traceable to these different modes of focusing upon “the subject”?³ Does it all really turn on the subordination or superordination of a verb form in relation to a substantive?

Now obviously one cannot in all seriousness sum up so complex an issue in the history of Western thought by means of such a simplification, though

I do not intend to elaborate the case more fully. However my rhetorical answer to my own rhetorical questions is: yes!

As we have seen above, even as the range of uses of the concept 'assumption' has been enlarged by Polanyi, so also has that of 'rules of procedure,' though this enlargement has been rather awkwardly achieved, not having been explicitly recognized by him as a goal. Even less, I believe, does Polanyi explicitly recognize the contrast that I have drawn above between his own program in relation to "the subject" and that of the philosophic tradition, despite his having relied upon the tradition's own repertoire of concepts that he then has forced into novel uses.

It is now possible to underscore what has been becoming more and more obvious as the above discussion has unfolded: Polanyi treats the phenomena of human knowing and coming to know *genetically*, in each of several senses. The phenomena of puzzling, appraising, coming to know, and upholding knowledge are always set within the temporal density and flow of our mindbodily being in the world. One is forced to assert this commonplace: knowing has a "genetic" history. It comes into being in time and can be understood only in terms of its telic character. The particulars of our mindbodily being that is prescinded from this temporal and telic setting will be a misdescription by no means without practical issue. This is what I mean by saying that Polanyi treats these phenomena genetically. His description and analysis is genetic both when it depicts an individual who is in the course of achieving knowledge and when it focuses upon the general fact of the "intellectual" powers of mankind. And further, it is also genetic on both the micro-scale and the macro-scale.

The treatment may be characterized as phylogenetic, that is in terms of the history of the race, insofar as Polanyi places his description of these phenomena squarely within the framework of his analysis of the hierarchical structure of being and his theory of emergence issuing in human culture and a firmament of obligations and values.

Therefore our heuristic powers of meaning-discernment, whether these are manifest in the explicit formalizing feats expressed in mathematics and formal logic, in the production of great works of literature, painting, sculpture, and music, or even just in the putatively most routine acts of achieving orientation as we walk into a familiar room, say, or read a familiar page of print written in our native language: all these are perceived by Polanyi to be at once both (now we shall have to say, ontologically/logically) continuous and discontinuous with our being as physical, biotic, and sentient creatures.

His treatment of these matters is phylogenetic too insofar as his description of the general phenomena of our learning tricks, solving puzzles, achieving skills, acquiring languages, discerning and formulating problems, seeking their solutions, and the like is set in a temporal and telic frame. His description is always oriented toward the *genesis* of different sorts of entities. This orientation shapes and informs the logic of his discourse, whether it deals with crystals, with the science of crystallography, the emergence of man, or the invention of alternative geometries.

At the same time his account of our knowings is ontogenetic. In comparing and contrasting the intelligence of Donald Kellogg, the human infant, and Gua, the baby chimpanzee, Polanyi's treatment is ontogenetic, that is, in terms of the history of individuals. And here his emphasis is upon the continuity and the irreducible discontinuity between their respective powers. He says: Donald [Kellogg] has acquired all his superior knowledge by the exercise of inarticulate powers—exceeding those of Gua mainly in the capacity for combining the practical, observational and interpretative endowments which they both shared—for setting in motion the operational principles of speech, of print and of other linguistic symbols" (*P.K.*, p. 103).

His treatment of Einstein's feat of discovery in propagating the theory of relativity is also ontogenetic. For example, he says: "Einstein acknowledged the profound influence which [Ernst] Mach's book exercised on him as a boy and subsequently on his discovery of relativity" (*P.K.*, p. 11). The question being addressed here is this: What are some of the things in his own history upon which Einstein relied and from which he made his heuristic leap? The fact that this question does not admit of an exhaustive answer, a heuristic leap being by definition an irreversible occurrence, should not obscure the fact that it is the "genetic" and telic picture that would determine Polanyi's way of posing the question.

Now with an explicit appreciation of the ubiquity of this "genetic" motif in Polanyi's disposition towards his subject, let us animadvert upon his conceptual innovations with 'rules of procedure'.

It is Polanyi's genius to have taken with philosophic seriousness what everybody knows and nobody denies, viz., before there can be any 'rules of procedure' (using this phrase as it would ordinarily be used in the philosophic tradition, to mean reflected, articulated, and explicit directives) there must first be *practice*, that is, what we did, have done, do; and then *a* practice, that is, what we then come to be *given to doing*—what is done "as a rule," as we should say.

This claim will become quite obvious, if it is remembered how readily we would remark the fact, were we to remark it at all, that a motor skill “comes back” instantaneously as a motor *practice*, even if unexercised for a long time: for example, “picking up” one’s game of tennis after many years of “neglect.” We may even proudly say: “The old moves are there! A bit rusty, to be sure; and there are the aches of unused muscles. But the game is still there.”

This then means that the use of the word ‘before’ above in the phrase, “before there can be . . .,” can no longer be disjunctively identified invariably as either the temporal use or the logical use of ‘before.’ The force of ‘before’ here is that which it would have before the explicitation and distinction into temporal and logical senses by means of feats of abstraction in reflection; before, say, we begin to talk and before we begin to talk about talking and before we begin to talk about talking about talk.

So also then with ‘rules of procedure.’ Obviously there are circumstances where we need to distinguish between explicit directives, on one hand, and a practice, on the other; as we also find it valuable to distinguish between pure reason and practical reason—if indeed these are two *different* distinctions rather than two *aspects* of one. It may even be useful on occasion to reserve the phrase ‘rules of procedure’ strictly for explicit directives. The import however of Polanyi’s, on the whole, unwitting conceptual innovation is to suggest that, if we wish to interpret coming to know genetically, thereby to recover our sense of the “logical” continuity of our acts of relying upon what we are *given to doing* with our reliance upon *explicit* directives to match the once useful but now hypertrophied sense of their *discontinuity*, then we may usefully enlarge the logical range of ‘rules of procedure’ to cover both cases. This elision of the putatively sharp boundaries defining the limits of the permissible application of a whole repertoire of concepts—‘subjective-objective,’ ‘mind-body,’ ‘knowing-doing,’ ‘theoretical-practical,’ etc.—typifies one of the rhetorical strategies used by Polanyi, however inexplicitly, throughout the course of his whole argument.

Now in a sense there is real embarrassment in having to say all this. Is the claim worth our notice that before there can be rules of procedure, in the received sense, there must have been first practice and then a practice? Is such an observation not philosophically trivial?

It is certainly difficult to imagine anyone who has understood the meaning of the claim wishing to contest it; to deny, in the face of our importunities, that it is worth taking seriously; in fact difficult to imagine

anyone even asserting that the claim does not bear in an important way upon our picture of coming to know and knowing. Then why this importunity?

Let me once again double back. Earlier I have suggested that in speaking or writing about the world you and I—you as you listen or read, I as I speak or write—are inextricably embrangled in the intentional bonds of our mutual native language in the midst of which we meet each other and the world. This language has the sinews of our bodies which had them first. Its grammar, syntax, and metaphorical and semantical intentionality are preformed in the “grammar,” “syntax,” “meaning,” and “metaphorical” and “semantical” intentionality of our prelingual mindbodily being in the world which are the grounds of their possibility.⁴

Now notice straightaway that *embodied in the words you have just read* is a picture of the way you and I and the world are at once separated and sinewed together. My way of being in the world in the act of writing is both expressed in and formed by the very words I am *just now* in the act of writing. The activity of composing what I come to write is a comprehensive feat of my existent ductile mindbody. What I am on the point of shaping into words—as much for myself as for you—is not arrayed before me in the way we imagine the visible world to be: as if, disembrangled and distanced from me, I have a perspective upon it, can command a view of the whole; as if I might exercise a sovereign gaze over a lucid transaction between the words by *means* of which I shape and the sense that their plaiting together *expresses*. Rather it is only through the choreography of words I mindbodily *move into* and *dwell in* as I write that what I mean comes to stand in the world somewhat on its own, exactly as the movements and gestures to which I give myself over cease to be the *latent* energies and meanings of my mindbody at that fluent moment when they appear as the *patent*, worldly dance I dance. My lexicon, at once constrained and made potent by the connective tissues of its etymologies, tonic with plexuses of metaphorical tension, dwells in my mindbody as the performance dwells in that of the musician before he has performed it. For me to compose—whether as I speak or write—is actively to flow along the mindbodily lines of intention that *are* this living, pneumocarnal lexicon. When this is accomplished, I begin to have somewhat before me—we begin to have somewhat “between us”—the figure toward which I have all the while been fingering.

On the other hand, you, there, move forth from your linguistically shaped and embrangled mindbodily being in the world in order to dwell in

these my written words so as to understand them or to understand them more fully. And because *you* are entangled in *your own* linguistically shaped being, you are drawn *in a certain way, rather than in some other*, into the metaphorical shapings of my written words.

If you and I sculpted our motility in the world, each conforming himself to the other as in a dance, with music that we sang together as we moved, we should both be in the world in the way we were by virtue of the rhythmic and sonic *picture*—our song—which, as we sang and danced, we would at once both *have* and be *in the midst of*. There can be nothing controversial about this. As little can there be in the claim that as we speak and hear, write and read, our mutual way of being in the world is shaped by the picture we both *have* and are *in the midst of*, embodied in the metaphorical intentionalities of our language.

The picture itself, then, is made of words. The reflection upon the picture, too, is made with words. And the etymological radicals of these words are indis severably plaited into the roots of our carnal being in the world, in fact, into our incarnation: in movement and flection, taction and traction, in tension and torsion, in pulling away and pulling together, in conjugation and conjunction, in action and proprioception. This is why language works. Our similar mindbodies conjointly in the world give it the necessary traction.

The torque and valency bonds of the words, with their complex root systems, used in the original picture above, then in the reflection upon that picture once removed, itself a picture, and finally in the paragraph immediately above, again, a picture, bind you and me and the world together in a very different way than any picture would whose language was mainly shaped by a fantasy of a discarnate experience of spectation. And it may well be wondered whether I have not seriously rigged the game against myself in having used the word ‘picture’ to name the phenomenon I am here describing.

I shall wish later to return to and develop more fully the contrasting pictures that we at once formed by the discourse in which we have described our experience of seeing and that derived from descriptions of our experience of hearing or touching. If it were an acritically observed convention among a people to disclose that, yes, they did indeed understand something by saying: “Oh, yes. I *hear*” rather than “Oh, yes. I *see*”—and the whole of their picture were weighted by this shift of discourse from the metaphorical intentionalities of representations of seeing to those of representations of hearing—we might suppose them to have a substantially

different picture from ours. Such an investigation may well shed still further light upon the logic of Polanyi's own way of being mindbodily in the world which in turn will elucidate the logic of his argument.

However, this notion of contrasting pictures of a writer's way of being mindbodily in the world which is expressed in the reflective instruments appearing in his text comes at this point in the service of answering the question: why this importunity of insisting upon the philosophical importance despite its obviousness, despite its not being in dispute, of reminding ourselves of the temporal and telic setting of our knowings. Polanyi's unexplicitated insight was that before there can be rules of procedure there must first be practice and then a practice. This insight raised the question: why make much of an issue no one could be imagined as wishing to deny? The answer is that the philosophical tradition will be inclined to hold Polanyi's insight to be trivial, misleading, or false *by reason of its own contrasting picture*. This insight is indeed so obvious in itself that great effort is required to take it seriously. The result however rewards the effort.

Yet why should all this be so difficult? Let it be stipulated that most writers on the subject of knowledge in the philosophical tradition embody and express within the metaphorical intentionalities formed by the very words in their epistemological texts a very different way of being mindbodily in the world than does Polanyi. Is it not possible even so to consolidate the views of Polanyi and the tradition by asking some fairly direct questions?

In order to see more clearly the nature of the problem it is well to ask what in this context a tradition is. To say of any writer that he is in the tradition is to say that he has gotten his problems from his predecessors, which is to say that both the problems and his approach to them are shaped by the language of the tradition, in other words, by its practice. Faced with any item from an explicit agenda of questions and puzzlements, an agenda itself long since established in the tradition, a thinker conscious of this usually falls quite naturally into the familiar practice. *This* is just what he *does* when he does philosophy. His reflection is at once facilitated by and under the constraint of this. However, questions having no self-evident connection with this familiar agenda and posed to a thinker in an "off-duty" mood are dealt with in terms of their *prima facie* meaning. The statement of Polanyi's insight about the relation between a practice and explicit rules of procedure derived from it, which no one can be imagined as denying, enjoys precisely this sort of relief from the tradition and its agenda. Since it is the kind of claim excluded from the agenda, and since, to common sense, it sounds like a truism, it is very difficult to regard it as

an insight, in short, to take it seriously in relation to the received agenda for epistemology. In our acritical, off-duty moments what is obvious is taken at face value and as worthy of no special notice. Only when a whole critical tradition has trained us to be on guard and has grossly impeached our sense of what is important in what is obvious do we have to struggle to recover our senses.

It is extraordinarily difficult then for any of us reading a book on “theory of knowledge,” vividly feeling all the expectations bred in us by the Enlightenment and its practice, to achieve in relation to that tradition the off-duty naivete of Polanyi. Indeed, as we see, the tradition even continues surfacing in the text of *Personal Knowledge* itself.

DIVERTISSEMENT

In the midst of this strangely reflexive piece of writing which refuses to let itself be written straight out from me to you, but insists instead upon turning back upon itself and me, yet another involutorial doubling seems required.

I feel compelled at this inconvenient juncture to examine some of the changing modalities of my relation to my own “thought” as it has so far issued in the page of print just now before you and from which you are reading these words. Surely doing this will seem to be no part of the present project. Worse still, it will seem to have no philosophic interest. The import however of much of what I am here trying to say is precisely that it does. So let me proceed.

One morning in May 1976, a barely intimated intellectual puzzlement that had “been on my mind” since the New Year seemed exigently to demand my attention. I sat down in an overstuffed, leather-covered chair in my study. Across the chair’s arms there lay an ancient lapboard, scarred by the hieroglyphs and doodles that were the visible signs of my own earlier puzzled intellection and also of that of my father before me. On top of this board there lay a yellow legal pad, faintly lined in blue, with two faint red parallel lines running vertically on the left-hand side of the page, making a margin.

Except for some printing at the top of the pad’s blue and white binding — “Official Legal Pad,” it said, “50 sheets 8½ in × 14 in” and then the manufacturer’s name and some serial numbers—there was only the blank, yellow expanse of paper before me. I held in my hand the barrel of a gold-filled ballpoint pen from which some of the fill had chipped off.

I glanced about the study, not quite as if looking for something or, if for *something*, then for nothing in particular, just for anything that would arrest my fugitive gaze. Crossing and uncrossing my legs, shifting my weight in the leather-covered chair, stretching the muscles in my neck and back, fingering the barrel of the ballpoint in my hand, I had a vivid but unreflected sense that both my puzzlement and its relief were somehow situated in the midst of the tension of my mindbody that held all these things and these events together. My *thinking*, I felt overwhelmingly and rather incredulously, was here, somehow *indeterminately in this place*, yet palpable and substantial, depending in the intentional bonds holding among my wandering gaze, my shifting weight, the stretching muscles in my back, the 8½ inch × 14 inch sheets of yellow legal pad, the hand on the ballpoint pen, the leather-covered chair. If my thinking on that mid-May morning were anywhere in the world, it was *here*.

My sense was not at all that it was *as if* the puzzlement were embodied in these very local ways. It didn't fit at all to think of it resting in my brain cells or lying in wait along my neural paths. Nor did it fit to think of puzzlements and their relief being in my mind, in contradistinction to my body, however natural and convenient this way of thinking might be in other settings. There was in fact only one way of thinking that did fit. The puzzlement and its relief were incarnate among these and other particulars of the circumambience of my present being in the world. They were just clearly *here* among all of these and nowhere else.

This sense could not be shaken. It was, I felt, within this concrete locus around my own incarnate self in my world that the puzzlement and its relief were lodged and from which it was yet to be more fully conjured. The tension among my fingers around the pen, the ballpoint at its end, my words about to begin to appear from within the movement and pressure of my hand and the expanse of blue-lined yellow paper was about to give in, I felt sure, to an incredible closure, and the puzzlement just now tensely pending between pen point and paper would achieve a miraculous new form of being on the page. And this is just what happened!

I thought: This is the way we think, this is the way that puzzlement makes its appearance in the world. Thought's incarnation is not adventitiously achieved as if it found a complaisant and heterogeneous host conveniently at hand. Descartes could not have been more wrong in implying that the *cogito's* relation to a particular body in the world is merely contingent.⁵

The yellow pages from my pristine legal pad, now violated by the agi-

tated and enspirited physical marks in blue, bore witness to my puzzlement and proleptically to its relief. The turbulent whorls of ink plowed into the pliant surface upon which with my pen point I had emphatically written to blot out the mischosen word, the inapt syntax, the phrases warped and sprung by my failed efforts to allow thought to find an incarnation, the sentences and paragraphs struck out entire with red felt-tipped pen, color-coded inserts and messages—in the margins, “see reverse side”—to my typist. All of these and more needed to have appeared in the world, if puzzlement itself were to appear. This dependency of thinking upon its carnal, worldly setting is not contingent. It is necessary.

Yet none of this was before you on the printed page above where I proposed this inconvenient look at the modalities of my relation to my thought. Would anyone wish to doubt all this? I think not. Does attention to it yield a different picture of my mindbodily being in the world in what I have written? Emphatically, yes. Does it matter? We shall see.

But there are other features of that mid-May morning event that are even more remote from the printed page above. Let us begin to see what some of these may be.

First I notice that I am bound to myself and to the world in the ligatures and vincula of language in such a way that I read as if I were listening and write as if I were speaking. This means that my relation to the words gathering momentum in order to appear on the yellow page from the tip of my ballpoint pen is oral-aural-tactile in a way and to a degree that would not be so were I to write primarily to my eye. No less is this the case with my relation to the words, sentences, strikeouts, amendments, inserts, and marginal revisions already congealed upon the page.

Since I read as if listening and write as if speaking,⁶ I do not rely decisively—certainly not only—upon my eyes to monitor the diction, grammar, syntax, and sense of what I have written. When in doubt about these, I read what I have written aloud. Borne by the sound of my own voice falling on my ears, my words are right if they *sound* right. And the rightness of their sound has to do indistinguishably both with the sensual pleasure they give and the sense they make. This oral-aural character of my writing is further evinced in the fact that in addition to ordinary punctuation, which as I use it tends to break up and order the succession of words as one would in the sonant stress and accent of speech,⁷ I am given to an excessive use of a visible convention other than periods, commas, colons, and the like, namely, italics. Italicizing words, especially a whole sentence or a paragraph, is rather like placing “ff,” for *fortissimo*, above the

notes in a musical score. They are instructions given in a visual medium for the way in which the visible notations are to be translated through a musical instrument into a sonic medium.

Secondly the process is worth noticing by which my puzzlement and its relief, whose first incarnation appears in the legal pad original, come in due course to appear upon the *printed* page.

After I am left with my yellow pad, now filled with words and sentences, strikeouts, amendments, inserts, arrows, marginal revisions, and directives, I take it to my typist who “roughs it out” as fast as she can on white paper in an IBM Executive, not looking back. What she returns to me is both the legal pad original and the derivative triple-spaced “rough-out” with her typos unretouched and blank spaces left at those places in the manuscript where my hand became unreadable.

I am immediately struck by the difference in my mindbodily sense of myself when consulting first one version and then the other. I do not find my mindbodily being as profoundly implicated with the rough-out as I do with the manuscript original. There is room here—triple spaces, wide margins, no lines in blue, no agitated whorls from the tip of my ballpoint pen to ensnare me once again in the tension attending the original incarnation of thought. By the same token however, when I read these words from the rough-out: “The picture itself is made of words. The reflection upon the picture, too, is made with words. And the etymological radicals of these words are indis severably plaited into the roots of our . . . incarnation: in movement and flection, taction and traction, in tension and torsion, in pulling away and pulling together, in conjugation and conjunction, in action and proprioception,” I do not mindbodily feel the force of them as vividly as before. And I almost wonder why this once seemed so important to me, what in fact it means.

The process of alienation and abstraction from sheer immediacy that first generated the barely intimated puzzlement of the morning in mid-May, then moved on to the legal pad original, alienation and abstraction increasing as it did, until from the printed page before you, one of a thousand such exactly like itself, prescinds from all of the idiosyncratic, concrete corporeality of its author, embrangled in the world, with his yellow pad and gold-barrelled ballpoint. And so also is the sense that this is where we all are, whence therefore our knowing begins and whither our account of it must return as to its radix.

Had it been in order to make this fact plain that Michael Polanyi wrote *Personal Knowledge: Toward a Post-Critical Philosophy*, an “illuminated”

manuscript in his own hand, like my legal pad original, would perhaps have better served this end than the hardback volume produced by the thousands at Routledge and Kegan Paul of London.

And yet for all of this process of abstraction, we are not, I am claiming, left without a witness to Polanyi's mode of dwelling mindbodily in the world as he engages himself in depicting the hanging-togetherness, the logic, of his own feats of seeking, coming to know, accrediting, and upholding knowledge, even in the mechanically printed text of *Personal Knowledge*. For that witness is lodged in the metaphorical intentionalities of the language in which he writes and as writing in which he is mindbodily entangled, shaped, and oriented to the task. Unpacking the intentionalities, hence the entanglement, shaping, and orientation of Polanyi's being in the world, is part of the task of displaying the unexplicated and, I shall later claim, novel model of logic that informs his book.

IV

The strange uses of 'logic' and its many cognates in *Personal Knowledge* are, at crucial junctions in the argument, like fissures in its surface opening upon still deeper geologic faults. The footing therefore is at times difficult, even treacherous.

I have been contending that in these innovations in usage, not less devastating in their import for being ingenuous, Polanyi has, largely unwittingly, forced some geologic rearrangements in the conceptual landscape where once there were neat, sharp, and definitive dichotomies of subjective-objective, empirical-conceptual, practical reason-pure reason, mind-body, epistemology-ontology (knowing-being), value-fact, psychology-logic, and even man-animal. In terms of the dichotomy witting-unwitting, itself a not always benign legacy of the Cartesian Enlightenment, Polanyi's moves clearly fall within the class of the unwitting. But there is a deeper wit at work, performing a large philosophic task in the realignment of concepts; in innovations in the use of familiar words.

This deeper wit, I have been contending, has its roots in and derives its logic from the archaeology of the imagination: the models, metaphors, analogies, paradigms, archetypes—the *picture*, as I have suggested, which in its most comprehensive sense each of us simultaneously both *has* and is *in the midst of*; and it has been my hope that this can be discovered by a kind of archaeological dig—a linguistic-conceptual-metaphorical analysis, an unpacking of the metaphorical intentionalities—which are perforce invested in what we say and write.

Above we encountered these words from *Personal Knowledge*: "Our acceptance of what is *logically anterior* is based on our prior acceptance of what is *logically derivative*, as being *implied* in our acceptance of the latter" (p. 191; emphasis added.) I observed then that this bewildering interplay

between the so-called strict, “logical” senses of ‘logical,’ ‘anterior,’ ‘prior,’ ‘derivative,’ and ‘being implied’ deserved extensive unpacking; and I promised that this would in due course be done. The time has now come to deliver on that promise. An archaeological dig must be begun to discover, if possible, the operative though tacit model of logic—the metaphor for the formal connectedness of things—in the light of which we can break the code that orders the work of Polanyi’s deeper wit.

Let us observe, to begin with, that there are many, many words in what we may call ordinary language, as well as in philosophic discourse and indeed in the special vocabularies of many intellectual disciplines, that are fundamental: they variously serve to state or allude to the ubiquitous, rudimentary, and obvious fact and differing forms of the connectedness of things.

Some of these, to take but a few as examples, are ‘form,’ ‘order,’ ‘whole,’ ‘integrity,’ ‘cause,’ ‘reason,’ ‘motive,’ ‘meaning,’ ‘gestalt.’ Not quite on logical all fours with these but clearly consanguine with them are ‘logic,’ ‘logical,’ ‘necessary,’ and ‘contingent.’ Yet these latter and their uses will have to be considered alongside the former.

The suggestion that these words belong together in a single class is perhaps surprising. In the best of circumstances, since they *are* fundamental, and therefore the range of their logical efficacy must be conceded to be very extensive when we deal with them, as I shall, in a rather abstract, generalizing way, that is, without placing them in some actual logical matrices of their familiar uses, such a classification of these words, even if plausible, would seem to be so loose as to be capable of making no clear philosophical point. That of course remains to be seen. All I mean to claim at the outset is that all of these words—and many others as well—are usually used to express the connectedness of one thing with another, or the coherence of many things together.¹

If deliberately vague expressions such as “the connectedness of things” and “hanging togetherness” be authorized, then we shall be able to consider ‘form,’ ‘order,’ ‘whole,’ ‘integrity,’ ‘cause,’ ‘reason,’ ‘motive,’ ‘meaning,’ ‘gestalt,’ as well as ‘logical,’ ‘necessary,’ and ‘contingent,’ in *relative* context-neutrality, thereby to explore the “logical” impact upon their uses as they are subject to the varying logical stresses implicit in the differing pictures operative in the archaeology of our imaginations. How, we will ask, do ‘form,’ ‘order,’ ‘logical,’ ‘meaning’ function differently when we are given to hearing and reading their meaning (i.e., recognizing their uses) first in terms of a paradigm derived from an account of vision, and then in terms

of one drawn from an account of audition? Let me anticipate the conclusions at which I intend to arrive and make plausible, in the service, you will remember, of discovering the metaphor in the light of which we can break the code that orders the work of Polanyi's deeper wit as he conducts the argument of *Personal Knowledge*. First I shall claim that if our uses of the aforementioned fundamental words were governed primarily by the logic of a picture abstracted into an *account* of hearing from what we would, wrongly, suppose to be the unreflected "phenomena" of seeing, then the conception of the world that we should have would differ importantly from that we should have if our uses were governed instead by the logic of a picture abstracted into an *account* of hearing from what we imagine to be the unreflected "phenomena" of hearing. Secondly I shall claim that our imaginations in the West, increasingly in modernity, have superordinated the visual picture over the auditory one. Thirdly I shall suggest that these pictures, competing rather unevenly in our imaginations, have derived respectively primarily from Greek thought and Hebrew thought, and that much of the dissent in our tradition, though rarely wittingly so, has turned around the inclination somewhat to redress the imbalance and to arrest the hypertrophy in our imaginations of the visual picture.

I shall not develop an intellectual-historical defense of this claim, which in any case lies beyond my competence. The historian of ideas will almost certainly be scandalized by so naive a suggestion. Even if he were to concede that it has some heuristic value, it is a claim that he would doubtless feel could not possibly be historically documented, so complex is the mixture of these motifs in a long, dense history. This caveat is legitimate and important. It does not however significantly blunt my point. As a philosopher, a phenomenologist, a hermeneuticist, I find I can make sense of our Western modes of thought only by invoking the distinction between accounts of seeing and accounts of hearing and the competing conceptual repertoires they respectively engender. Furthermore it is plainly so that Greek and Hebrew thought differ in their respective superordination and subordination of these two sense modes in the architectonics of the imagination. It seems almost inevitable to me to conclude that the metaphorical intentionalities of our own imaginations, however archaically, have been shaped by these motifs. In the course of my argument I shall construct an ideal type of each and employ these as heuristic devices. This may bring offense to historians, classicists, and biblical scholars. However, it is, I claim, an entirely licit mode of philosophical argument. Indeed if

intellectual history offered no traces of these motifs of our imaginations, we could infer them simply by attending to our ways of describing sense modes and then performing a transcendental deduction of the conditions for the possibility of the kind of experience that we in fact have.

If, then, one of the major theses of these meditations be granted, the thesis, namely, that the logic of the picture that each of us both *has* and is *in the midst of* disposes our reflection to “choose” as its medium some rather than others of the at-hand instruments of reflection, namely, words with their own metaphorical intentionalities, then of course no phenomenology can be “presuppositionless.” Therefore a fortiori what follows will not be. I shall focus only upon what elucidates my argument.

But first a caveat. As I live, move, act, speak, hear, attend to this and that in my world, I am an integral mindbody, for whom all my senses are incessantly and simultaneously at work, binding me into and distancing me from my circumambience. My orientation, sometimes more dependent upon this or these senses, sometimes more dependent upon that or those others, is always a function of an orchestration among my sensory powers so fine as to defy analysis. We cannot exhaustively *reflect* the deep wit of the living mindbody in its world. We “know” of it only because and as we continually rely upon it.

Having warned of the hazards of doing so, let us begin a kind of phenomenology of seeing and hearing.

As I take my daily five-mile jog through the countryside, moving forward with each stride, bounding up and down as I glide off the ball of one foot and come down on the flat of the other, swinging my left arm forward and then my right, alternately swinging them both somewhat down and back, to complement the movements first of my right leg and then of my left, my shoulders synchronously alternating their forward and backward movements with my moving legs and arms, my trunk constantly in movement in the midst of these motions, responsive to and expressing them, my head on my shoulders and my eyes in my head are never at rest. The “time” during which my body may be said “unchangingly” to *endure* as the spatiotemporal background and condition for the movements of my running mindbody is a different “time” from that in which these *motions* are occurring. The changing forms or shapes of my *running* (as opposed to my merely *enduring*) mindbody have a *style*. Clearly my running mindbody’s forms are dependent upon the causal integration of its several spatiotemporally enduring, but physiologically analyzable, parts. These parts, *considered as analyzable and as continually undergoing a causal integration*, have a “time”

that is not that of my sheer “unchanging” mindbodily endurance throughout the course of my jog; nor is it that within which its style evolves, moment by fluid moment, and becomes manifest.² These forms or temporally ordered configurations, when taken together, at once *are* and are the *manifestations* of a motif, a motive.³ But of course there is a great deal more going on with my mindbody during the course of my jog. Not only are my head on my shoulders and my eyes in my head moving; my chest rhythmically rises and falls as I breathe; and I can hear the expiration and inspiration of air, its legato flow punctuated by the beat of my swinging legs and the slap of my shoes on the ground, which I both hear with my ears and feel proprioceptively and kinesthetically in my ankles and calves, in my hamstrings and buttocks, in the muscles of my lowerback and at the cervical vertebrae at the base of my head, slightly rolling metronomically to and fro.

All the while, too, my eyes shut and open at more or less regular intervals, varying as salty sweat—or rain, or snow—drain down my brow through my eyebrows onto lids and into eyes, alternately shutting out and opening upon the visible world and visible space. Too, as this happens my eyes move up and down, from side to side, focusing close at hand or upon the distance according to the demands of this or that explicit reflection and intention—“is that blue pickup truck heading this way going to move to the left of the yellow line and give me room?”—and undergoing fine or gross postural changes as I run, obedient to this or that interest in my environment, responsive to this or that fugitive and fragmentary thought or fantasy. All *these* contingent movements and changes have a temporal form that is different from that of my “unchanging,” enduring mindbody; different, too, from that of the continually causally integrated parts of my mindbody; different from that in which the style and motifs of my running appear.

In this setting, there is for me nothing static about what is instantaneously appearing and disappearing in my visual field of which I have no awareness as such. I suffer no disorientation on this account. While what I “see” is, as seen, a dynamically unstable mosaic of visual “images,” I suffer no giddiness. The visible world “out there” that keeps appearing and disappearing for me in the appearances that my eyes behold is no less an integral totality than is the audial world, the tactile world, the proprioceptive world, or all of these taken together. For my integral, moving mindbody, relying upon its own deep and ultimately unsearchable wit, integrates these fugitive impressions (themselves already assumed into the

meaning-discerning, meaning-conferring texture of my mindbody) in short, into a world. The temporally unfolding, dynamically unstable mosaic of my visual images seems *contingent*. For reflection however the deep wit of my tonic mindbody has already conferred upon them *what now*, after this integration, has come to seem a necessity. So also the contingency investing the “mosaic” of auditory, tactile, proprioceptive and kinesthetic images comes to seem a *necessity*.⁴

Let us now abruptly “stop” the “time” that is the “temporal” form of the causal integration that the physiologically analyzable parts of my mindbody are continually undergoing and is, too, the “temporal” form of our *perception* of this causal integration. Let us also “stop” the “time” that is the “temporal” shape within which my running, from moment to fluid moment, evolves and expresses its style, and is, too, the “temporal” form of our *perception* of the evolving of it and of the style; that is, too, the form of the temporally ordered configurations that at once *are* and *manifest* a motif, a motive.

Finally, let us stop the “time” that is the “temporal” form of the contingent blinkings and focusings of my eyes in my moving head and that is as well the “temporal” form of our *perception* of these.

The motion of my running and its time are stopped; the “motion” of the causal integration of the physiologically analyzable parts of my running mindbody and its “time,” which were the *conditio sine qua non* of the former, have also been stopped. So, too, my contingent blinkings and focusings and their time.

There remains, then, my unmoving and, throughout the duration of my five-mile jog, unchanging, enduring mindbody. It would be easy to rejoin that, after all, my mindbody has changed, moved, during the jog. For example, it moves through T₁, T₂, T₃, etc., as it moved from point X to point Y; it is now tired and its fatigue is quite manifest in the deterioration of its running style, in the slowly disappearing integrity of its motifs; and it is an hour older. Of course I do not enter into these issues because to do so would make no contribution to the achievement of the insight I am trying to induce. For that purpose it is sufficient to be able to say that there is a “time,” a “temporal” form, during which Poteat remained “the same,” unchanged, was readily recognizable as “the same man” at the beginning, at the middle, and at the end of the jog.

The “time,” then, during which my mindbody may be said “unchangingly” to *endure* and that is the “temporal” form of our perception of its endurance is a kind of “eternity,” where there is no change nor shadow

that is caused by turning. From the description of the lively and dynamic mode of being in the world of my mindbody—this description itself of course an abstraction—by successive steps of abstraction in which change, motion, style, motif (one could now add “intention”) along with the various “times” that are the forms of each, we have moved to the description of a merely enduring and static mindbody, existing in a “time” that is hardly distinguishable from “eternity.”

I find myself tempted at this point to rejoin to my own words: “Surely, your enduring mindbody, the one from which has been conceptually abstracted all of the qualities except the quality of ‘recognizability as Poteat at the beginning, middle, and end of a five-mile jog’ can in fact endure only if the process, say, of the causal integration of its parts continues throughout.” And I answer: “Yes, of course. The force of my warning above was precisely this. Poteat is in fact the name of no less than an integral mindbody, alive, moving, acting, speaking, and hearing, attending to this and that in his world. And even what I have just said is itself an abstraction from a complex, existential reality. However, the calculated process of abstraction that ends with my unmoving, unchanging, enduring mindbody, in a ‘time’ that is hardly distinguishable from ‘eternity,’ is as licit as is the above abstraction; and the articulation of this *particular* abstraction is necessary if we are to focus upon the unique powers and limits of sight when compared with hearing.” Perhaps someone will say: “But you could not *see* with your eyes fixed in their sockets, unmoving between unblinking lids.” Again, of course! The multiple scanning movements of the eyes are essential to sight. However, if we are to discern the unique powers and limits of sight compared with hearing as depicted in the received accounts of these, we must overlook these qualifications and attend to the abstraction that can disclose them.

Bearing in mind my caveat above that we cannot exhaustively reflect the deep wit of the living mindbody in its world; remembering also my claim that a presuppositionless phenomenology is impossible for incarnate knowers; and, finally, not forgetting how times, motions, motifs, and intentions have been abstracted from the paradigm situation we shall now investigate; let us see the ways in which the visible world as depicted in *this paradigm* differs from the audible world as we shall depict it. From this analysis it will be possible perhaps to infer some of the ways in which the force of our fundamental words, ‘form,’ ‘order,’ ‘whole,’ ‘integrity,’ ‘cause,’ ‘reason,’ ‘motive,’ ‘meaning,’ and ‘gestalt,’ may vary as they are subject to the logic first of one picture, abstracted from our “actual” *seeing*, then of

another picture, abstracted from our “actual” *hearing*.

I sit in my study and look at an abstract expressionist canvas, hanging on the wall. I am far enough away from it so that my focus upon it produces no discernible tension in the muscles of my eyes; yet not so close that it entirely fills my visual field. I am comfortable in my chair; I feel no muscular torque. My shoulders are square, my head and neck easily erect and still, my eyes open, unblinking and at rest in their sockets. I am acutely attending to a point at the center of the canvas where two straight diagonal lines would intersect if one were drawn from the upper left corner to the lower right, and another drawn from the upper right corner to the lower left.

What do I see? Even though I maintain the stasis of my posture in relation to what is before me, I am aware that the field of what I see is anything but static. There *is* a center of my vision. But there are lines of intentionality that run away from it in all directions. I feel, even though in fact unmoving, profoundly drawn to, “moved” toward, but also, insofar as I wish to see the *canvas*, “repelled” by the margins of my visual field that themselves lie on all four sides beyond the limits of the painting. What I see here is surfaces pervaded with dynamism.

Whatever may be the complex relations between concepts like ‘dynamism’ and ‘temporality,’ they are rarely if ever interchangeable with one another in use. Therefore to hold that my visual field, subject to the above conditions, is infused with dynamism need not entail that we cannot at the same time say of it, still subject to the prescribed conditions, that the “time” during which my unmoving gaze is fixed upon what is before it and the “time” through which the visible scene “unchangingly” *endures* is indistinguishable from eternity.

The propriety of making this claim is further endorsed when I remark another, perhaps the unique, feature of the visual field before my fixed gaze: its dynamism notwithstanding, every “part” of that determinate surface, bounded by the frame of my open eyelids, is at once sensuously⁵ and simultaneously co-present with every other “part.” And when I take one further step back from my “actual” seeing, that is, when I abstract myself one remove from my seeing, already limited by our prescribed conditions, I gain the unique power of sight, prescinded from the dynamism that characterizes “actual” seeing: the power to see in an instant without temporal density an at once finite, static, and eternal spatial configuration whose “parts” are determinate and sensuously simultaneously co-present in (visual) space with each other and with the totality that they jointly comprise.

What can be seen at my glance or gaze according to this description is *finite, determinate, static, self-contained, complete in itself*, making no allusions to anything beyond its own boundaries. This will strike you as plausible only so long as you cooperate to suppress the tonic mindbody with which your own visual powers are orchestrated and which would, in fact, draw your powers of vision out of this contrived, artificial, finite frame to make allusions to *all* of your sensory powers and their circumambient world. Hans Jonas is quite correct. It is because of this *picture* of sight, abstracted from actual seeing and juxtaposed with the existential reality from which it has been drawn, that we come to have the contrasts eternity-time, being-becoming, essence-existence.⁶ I will want to add here and develop later yet another contrast, necessity-contingency, which is also derived from this juxtaposition. Jonas correctly says: “[The] indefinite ‘and so on’ with which the visual perception is imbued, an ever-ready potential for realization, and especially the ‘and so on’ in depth, is the birthplace of the idea of *infinity*, to which no other sense could supply the experiential basis.”⁷

However, a historical gloss upon this claim seems essential. That picture of sight by which the Western imagination is dominated and by which therefore the conceptual limits of its thought were given did not come to be imbued until the early Renaissance with the *visible* “and so on” that gave rise to the idea of infinity. This awaited a further feat of abstraction from the messy complexity and contingency of our actual seeing, implicated in the fine orchestration of all our sensory powers in our mindbodies: a feat perhaps first accomplished by the linearly perspectival paintings of Giotto (c. 1276–1337) in the Arena Chapel at Padua, hinted at by his anonymous predecessors, and fully realized by Masaccio (1401–1428) in *The Holy Trinity*, by Ghirlandaio (1449–1494) in *The Last Supper*, and by Leonardo (1452–1519) with the aerial perspective and *sfumato* of, say, *St. Anne and the Virgin*. This development, fateful for our modern Western imaginations, only achieved discursive embodiment in treatises on the “rationalization of sight” by Leon Battista Alberti, Pelerin (Viator), and Albrecht Dürer. The innovations of Copernicus, Kepler, and Descartes are scarcely imaginable apart from these artistic precursors.⁸ And one wants to add that none of these feats of disentanglement from the world’s rummage is likely to have occurred without the more radical operation in our imaginations of the picture of God, a personal being who as Creator transcends the world that he has made *ex nihilo*, for whom therefore it is transparent and over which, in conse-

quence, he can exercise absolute sovereignty. Merleau-Ponty has sensed this. He says:

In a way paradoxical only in appearance, two-dimensional perspective [he means here what is usually called "three-dimensional perspective"] is adopted from a certain point of view in order to achieve a notation of the world that would be valid for everyone [valid for a god, who would be 'nowhere']. It congeals the lived perspective and, in order to represent what is perceived, adopts an index of deformation which is characteristic of my standpoint. . . . Since this deformation is systematic and occurs according to the same index in every part of the scene, it transports me amidst the very things and shows them to me as God sees them. Rather, to be more precise, two-dimensional perspective does not give me a human view of the world. It gives me *knowledge that can be obtained from a human viewpoint* by a god who does not get caught in finitude.⁹

Copernicus contemplating the orbital paths of the planets, as if from the surface of the sun, and Descartes contemplating his body, from within a picture of himself as discarnate *Cogito*, are both creatures of the picture of a God who calls the world into being out of nothing and for whom therefore it is transparent.

That the picture of sight given us by Jonas is a modern elaboration of motifs already found in the thought, art, and aesthetic theory of classical antiquity is even more strikingly brought home by the contemplation of the paintings of the greatest innovator of modern painting, Cézanne, who reverses the whole process. When we look at *them* our whole four-hundred-year tradition of an infinitizing gaze, cultivated by Renaissance linear perspective, is met with a palpable, tactile, and proprioceptively physical rebuke.

What then are the relations among the simultaneously co-present particulars comprising the scene before me as I look at the painting on my study wall? Subject to the strict limits deliberately imposed upon the description of that scene so far given, we can, with Hume, whose thought was impregnated by this same picture, say: their relations are those of simple spatial contiguity. Since the "time" of my "unchangingly" enduring mindbody and what is before it in this scene is indistinguishable from eternity, the relations between some of the co-present particulars and others cannot be that of causes to effects, effects to causes, for in such a case a different use of the word 'time' would be required. If you superordinate our picture of

seeing over our pictures of hearing and touching; and then take this picture as the basis for an account of perception as such; and, finally, derive your whole epistemology from it; then causality will *of course* become problematic, as it did for Hume. A fortiori even more will the subject, the person, one's own identity as a self enduring through time, become so. "Causality" cannot be seen by sight so construed. It can be "seen" only when sight remains "temporalized" by virtue of its conceptual interdependence with the intentional mindbody.¹⁰

If then the co-present particulars in the scene before me, as described, cannot be conceived as causally related, can we conceive of them as standing to one another as the elements of a motif stand when these are realized and resolved in the motif? Can their "connectedness," in other words, be motivational?

Whether we raise these questions from the standpoint of what motives *do* and how they *do it*, addressed as they are to the tonic being of our mindbodies; or whether alternatively from that of what they *are*—that is, the nature of their mode of figuring, their way of bodying-forth meaning in the medium in which they appear, their style of establishing and expressing connectedness—the answers are easily come by in the cases of a running style, a musical motif, the temporal and intentional "shape" of a moral action, appearing out of the dense history of the agent and the complex setting of his action whose quality may be judged by this motive. Since, as we have seen, special "times" are required for motives to become manifest and be grasped in the above three sorts of case; and since it is precisely these "times" which were artificially stopped to produce our account of sight; it follows that the co-present particulars of the scene before me as I depict myself as looking at the painting can no more be motivationally related than causally.

But what then becomes of the architectural or pictorial motif? Addressing this question will enable us to see more profoundly the suppression of all concepts of time from the picture of my looking at the painting except that "time," indistinguishable from eternity, during which I and the painting before me "unchangingly" *endure*.

I have said that an architectural or pictorial motif is an enduring spatio-temporal configuration that seizes, holds, and "moves" (or arrests, that is, "moves" to *stop*) the eye. The power of such spatiotemporal configurations to perform these functions is dependent upon their having a far richer context than that supplied by the depiction, above, of myself looking at the painting. Painting and architecture as objects of sight are, to be sure,

importantly disanalogous. One cannot for example "see" the Cathedral at Chartres in the same sense as one can "see" Velasquez's *Las Meninas*. Even so we *can* say that motifs can appear in an account of seeing of both painting and architecture only when a "time" other than the mere time of "unchanging" endurance—other, that is, than the "time" that is indistinguishable from eternity—finds its way into the account. Put another way, we can see motifs *as motifs* only when our seeing is finely orchestrated with all our sensory powers in our mindbodily activities in the temporal thickness of the world.

To this it might be rejoined as follows: "The picture of Poteat looking at the painting, for all of its ingenious reduction of the actual experience of seeing, is incomplete and is formally indistinguishable from the richer picture of seeing in which 'seeing motifs' may appear. If motifs can be seen *as motifs* only in a picture that retains the connection between sight and the tonic mindbody, then it is also true that 'seeing the parts *as parts* of a visual totality in an eternity' retains a connection, however reduced and attenuated, to the tonic mindbody. Your quest for an absolutely abstract account of seeing is a failure. The 'time' of 'unchanging' endurance is not eternity. This 'eternity' is no *totum simul*. It possesses the after-images of temporality." This I gladly concede, for the concession serves to make my point: *it is impossible for me so to prescind from my own incarnate being as, in reflection, exhaustively and coherently to represent the perceptions of a discarnate being.* My account here will necessarily remain subject to these limitations; except that instead of bewailing them as the regrettable impediments to true knowledge, I shall embrace and try to make epistemological sense of them.

It takes "time," then, to see, in each of several senses. Seeing is enmeshed in the temporal thickness of our mindbodily being in the world. But "time," temporal successiveness, is not *intrinsic* to the relations among the parts of what we see when, in our second-order account of it, we abstract ourselves from the motility of our living mindbodies. We may be able to isolate and thereby come to see that the unique power of sight compared to other senses, as it is represented in the above picture, is the power simultaneously to behold all the co-present particulars of its peculiar sense-manifold. Only the "time," indistinguishable from eternity, within which all that is simultaneously co-present may "unchangingly" endure, is requisite for sight to exercise its unique powers.

No less of course does it take "time" to hear, in each of several senses. Hearing is assuredly embrangled in the temporal thickness of our tonic mindbodies. But "time," temporal successiveness, does seem, *prima facie*,

to be *intrinsic* to the relations among the “parts” of what we hear. Even to hear middle C *as a tone* (as, that is to say, something alive, tonic) requires a “time” different from the eternity within which the particulars in the scene before my eyes, as described, are co-temporaneous.

But before I elaborate further upon a phenomenology of hearing in contrast to seeing, let me first return to and develop a claim made earlier. From our experience of seeing, as depicted, we derive the contrast *necessity-contingency*: a contrast absolutely crucial to epistemology and to logic and therefore to any understanding of Polanyi’s conceptual innovations. However let us issue an essential caveat. To this point I have followed Jonas in claiming that the picture of vision is our “experiential” source of the contrasts eternity-time, being-becoming, essence-existence. To these I added the contrast necessary-contingent as similarly derived “experientially” from this same picture of vision. However, we may well discover, when we have rung the changes on the picture of audition, that it too provides a different but complementary “experiential” basis for all, or at least for some, of these contrasts. We may discover for example that the *completed* audial gestalt of a piece of heard music will contrast with the temporally unfolding succession of its contingently sounding constituent notes *while in the course of being heard*; and that this will give us a supporting but different “experiential” basis for an eternity-time as well as a necessary-contingent contrast.

Whatever the contemporary usage and “logical” context of a word or concept whose meaning varies with its use, the etymology of a word is multivalently implicated in its logical context. Let us then examine the etymology of ‘necessary,’ ‘necessity.’ The radicals derive from a compound of the Latin *cedere*, and *ne*. *Cedere* means: to go, to proceed; to go away, withdraw, give ground, retire. *Ne* is the original Latin particle of negation. *Necedere*, then, means: not to go, not to proceed; not to go away, not to withdraw, not to give ground, not to retire; and by transference, to be unavoidable, inevitable.

But we can get an even more vivid sense of the etymology of ‘necessary’ if we juxtapose it to that of ‘contingent.’ The Latin verb *contingere* means, in transitive form, to touch, to touch with, to border on, to reach; and by transference, to concern, to affect. In its intransitive form it means: to happen, to befall (usually of good luck).

If then ‘necessity’ means that that does *not* go, does *not* give ground, does *not* retire; and if ‘contingency’ means that that happens, that befalls, we can see, first, that the contrasts in our epistemological and “logical”

uses accurately reflect the contrasts in their etymologies; and second, that necessity allows—at least while subject to the picture of sight—*only* for that sense of “time” within which a thing “unchangingly” endures and that is indistinguishable from eternity, while contingency precisely *requires* those senses of time in which motility, change, style, motif, and intention—perhaps even novelty—may appear. And we can see, too, that this contrast derives from our above picture of seeing, since it is uniquely in this picture that the “time” that is eternity stands out opposed to all the others. The relations among the particulars of my visual field are the very opposite of contingent. Being simultaneously (visually) co-present, they are in a necessary relation to one another, that is, in the relation of not withdrawing from one another, not retiring from one another: in short, in the relation of being unmovingly, unchangingly present with one another, in the sense of ‘present with’ associated with visible things.

The “logic” of that account of seeing lodged in the imagination and acritically relied upon, weighted toward eternity, being, essence, and necessity, has the overwhelming power to predispose us toward a conception of things in which the eternal, unchanging, and static is superordinated “ontologically” and “axiologically” over other conceptions.

We will have to return to this analysis of the etymologies and of the different experiential bases of our senses of necessity and contingency respectively when we bring them to bear upon that paradigm in our tradition for the uses of ‘logic,’ ‘logical,’ and their cognates. We must first however do a phenomenology of hearing in order to sharpen our sense of its contrast with seeing.

Let us, to begin, return to a passage of some length in the midst of my daily five-mile jog as described above. Now however instead of attending to the situation of my eyes in my head on my shoulders, blinking shut, blinking open, focusing on “objects” near at hand, on “objects” in the distance, with their temporally unfolding and dynamically unstable mosaic of visual “images,” we will observe the situation of my ears.

The first thing I notice is that there are not objects for them, not even any “objects”¹¹ in that sense of object appropriate to our analysis of vision: in the sense, namely, that suggests the existence of entities all of the particulars of which are simultaneously co-present in (visual) space. Indeed, the sense of there being objects, something enduringly over against me,¹² all of the particulars of which are simultaneously co-present with one another is, as we have seen, delivered in experience paradigmatically by sight—albeit, concretely and primitively we rely heavily upon the taction

and proprioception of our mindbodies from which the visual object has been prescinded and upon which it remains parasitical. To speak therefore of there being “objects” of our hearing is to trade upon a fruitful and entirely licit analogy, but so long as we judge from the standpoint of our account of sight, nevertheless no more than an analogy.

A second feature that I notice as I jog along is that whereas I enjoy a certain autonomy vis-à-vis the world of seen objects, since spread out before me and simultaneously present in (visual) space, as they are, I achieve and maintain a sense of orientation and agency toward them, I am on the contrary largely passive to the sonic world. I do not routinely open myself to and shut myself out of this world: there is no audial “blinking.” Nor can I with the same efficiency and ease achieve sanctuary and repose in relation to the heard world that simply shutting my eyes enables me to achieve in relation to the seen.

The sounds that I hear neither biddable nor forbiddable may be beautiful—the melody of what I instantly judge to be the song of a bird—or it may be full of menace—the gearing roar or what I instantly recognize as an automobile about to claim the right of way. To be sure, having heard or wishing to hear, I can deploy my moving mindbody this way and that the better to hear or to explore my sonic ambience for this or that audial clue. Still the autonomy I exercise here hardly compares with that that I enjoy when seeing the visible world.

Let us, in this description of my daily jog, once again abruptly “stop” the “time” that is the “temporal” form of the causal integration that the physiologically analyzable parts of my mindbody are continually undergoing and is, too, the “temporal” form of our *perception* of this causal integration. Let us also “stop” the “time” that is the “temporal” shape within which my running, from moment to fluid moment, evolves and expresses its style, and is, too, the “temporal” form of our *perception* of its evolving; which is, too, the form of the temporally ordered configurations that at once *are* and *manifest* its motif. Finally let us stop the time that is the “temporal” form of the contingent blinkings and focusings of my eyes in my moving head, which is, as well, the “temporal” form of our *perception* of these blinkings and focusings. What anomalies appear for hearing when we compare it with our visual case?

Recall that I earlier claimed that *even though subject to the above restrictions*, we should still see surfaces pervaded by dynamism; but that we would also see every “part” of those determinate surfaces, bounded by the frame of our open eyelids, as simultaneously co-present with every other “part” in a

“time” that would be indistinguishable from eternity. And I suggested that by taking one further backward step from the immediacy of seeing we could eliminate the dynamism, thus to be left with the unique power of sight: the power to see in an instant without temporal thickness an at once *finite*, *static*, and *eternal* (visually) spatial configuration whose “parts” are determinate and simultaneously co-present with each other.

How is our *hearing* affected by these eliminations? In stopping the “time” that is the “temporal” form of the causal integration of the analyzable parts of my mindbody I do of course make movement of any kind impossible, hence a fortiori the movement associated with my passage through the five miles of my jog. But this is of interest to us here only insofar as this movement, hence the “temporal” *form* of this movement, must be *presupposed*, if there is to be a setting for the “time” within which the style of my running is evolved and expressed and which is also the “temporal” form of our *perception* of the style. In other words, we may, indeed we must, consider as if it were independent the “time” within which the style of my running is evolved and expressed; consider it as the “time” required for a style to appear in the world and be what it is; the “time” that is the *conditio sine qua non* for the existence and the perception of the existence of a motif. We must bracket the “ontological” questions in order to attend exclusively, step by step, to the phenomena of seeing and hearing as they appear in the pictures of them given in these reflections, in, that is, these particular abstractions from the immediate, concrete temporal flow of existence.

Suppose finally that we stop the “time” that is the “temporal” form of the contingent blinkings and focusings of my eyes and is also the “temporal” form of our perception of these.

By making these moves, we now find ourselves, in this *account* of this state of affairs, where we earlier concluded, in a similar account of my looking at a painting, that I would see surfaces infused with dynamism. Then we found that by making one further move of abstraction, we eliminated the dynamism, to be left with a (visually) spatial configuration whose “parts” are determinate and simultaneously co-present with each other and with the totality that they jointly comprise: *finite*, *static*, and *eternal*, since they are arrayed before my glance, *in this picture*, in an instant without temporal thickness.

Could anything be heard in the world depicted here: the melody of what I instantly judge to be the song of a bird, the gearing menace of the roar of what I instantly judge to be an automobile? I think we must concede that a

sound could be heard. After all, if the particulars of the visual scene before me, in the above description, are *seen* to be simultaneously *co-present*, then they together and each one singly (whatever that may mean) would have to be *present*, be it ever so instantaneously. At least an *Augenblick* of the “time” of endurance is necessary, else there would be nothing. This “time” that is indistinguishable from eternity is that with which, for us, eternity is pregnant.

If this be so, then that “moment” (and of course we have grave difficulty imagining what, in this picture, ‘moment’ may mean) that provides the existential condition for the instantaneous co-presence of the “objects” of my glance also provides it for a sound to be. Let us imagine the simultaneous sounding in the *Augenblick* of three tones: say, middle C, E next above it, and A#. This will both tax our imaginations and place severe strain upon our picture, for a “tone” is *alive*, requiring the lively time within which to be *distended*, its temporal distention precisely being its life; whereas the *Augenblick* is really a very thin slice of dead (visual) space. What we should then have in this slice of dead (visual) space is the chord: C, E, A#. We could not imagine within the limits of our picture its brilliance enhanced by hearing it resolved into the chord C, F, A.

Having however made this concession to our argument for the sake of its strict probity, we can then say that tones and, indeed, sounds—whatever they may be in a very thin slice of dead (visual) space—cannot in any significant sense be heard in the world so depicted. Nor a fortiori can the melody of birdsong or the roar of an automobile. The instants that provide the conditions for the existence of the simultaneously co-present particulars in the scene before me in our picture have among them only the relations of instantaneous co-presence and (visual) spatial contiguity. Of any of these we may say that it is above or below, to the left of or to the right of some other.¹³ Such a “conceptual” matrix provides no “logical” place for a tone—or even just for a sound to appear. If we are to have sounds, we shall have to restore to the picture the conceptual resources for introducing real temporal succession, else what is “dead” in a slice of (visual) space will remain so. The “time” through which a tone is distended, giving it life, is a temporal succession, whether during the span of a whole note, quarter note, sixteenth, or whatnot, which is not the same as but analogous to the “time” that is the “temporal” form of the causal integration of the physiologically analyzable parts of my mindbody, to the “time” within which the style of my running is evolved and expressed, and to the “time” of the temporally ordered configurations that at once *are* and *manifest* a motif.

Let us explore these matters further, abandoning the now too abstract terms of the above argument by using human speech and music as our models of hearing and the heard.

The musical notes, *as notes*, that I am just now hearing are not the *effects* of the ones I heard a moment ago; nor are they to be the *causes* of the ones I am about to hear. Therefore the “time” of causal integration is relevant to this phenomenology of hearing only as providing background conditions that we may remark and then ignore. The words, *as words*, that I am just speaking are not the *effects* of the words that I spoke a moment ago; nor are they to be the *causes* of the ones I am on the point of speaking.

The “time” of co-temporaneous endurance in (visual) space is of equally slight interest in this analysis. A melody, qua melody, does not endure in (visual) space, albeit the instrument that propagates it obviously must. My lively and actual speech-act, qua speech-act, does not endure in (visual) space, although my mindbodily being clearly must. We need then neither the “time” of co-temporaneous endurance in (visual) space nor that of causal integration, except to provide a taken-for-granted background, in order to constitute the unique features of the sonic and audible worlds of music and lively speech. This is our present desideratum.

If notes in a heard melody are not related in (visual) space, nor yet causally related, then how? The first answer to be given of course is that they are *temporally* related. But what does this mean?

St. Augustine expressed the frustration of all who have ever attempted to ask: what is time? “If no one asks me I know; if I wish to explain it to one that asketh, I know not.”¹⁴ We will have reason to return later to the interesting question of how, *specifically with reference to the nature of time*, Augustine could both know and not know. For the present I only wish to cite his famous remark as a warning of the dangers that will beset us, without myself in the least presuming to address the large, and really too abstract, question about time. Here I am engaged in doing a phenomenology of hearing and my interest in time has been elicited by and will remain tightly implicated with the unfolding of this enterprise. My interest is, after all, in the *pictures* of seeing and hearing that we bear in our imaginations; in showing how their “logic” inclines us, in the Western philosophical tradition, toward certain uses of ‘logic,’ ‘logical,’ ‘imply,’ ‘anterior,’ ‘premise,’ and the like, and inclines us unreflectingly toward excepting certain others.

When thinking about “time” in its relation to melody (as also with the case of lively speech) our first inclination is to say that it both *separates* and

joins notes (and spoken words). In an obvious sense this is true. But this is hardly helpful, since it is not *only* "time" that separates and joins. Does not space do the same? Our initial claim, then, comes to saying that "time in its relation to melody and speech both separates and joins notes and words in the way that *time* separates and joins." We need to know how this is.

But let us first dispose of an issue, not unimportant to our understanding, that would not receive attention in an analysis limited to the relation of "time" to melody and lively speech: the relation, namely, of time to the hearing of that musical entity, the chord.

Except when played arpeggio the notes of a chord are sounded simultaneously. Even when played arpeggio the constituent notes jointly display a motif, the motif that make them the arpeggio of some *particular* chord and not another, notwithstanding that they are sounded successively and hence may also be construed as a melody.¹⁵ While chords are an essential element in the music written to be performed by many single instruments, and especially by instrumental and vocal ensembles, temporal successiveness is intrinsic to music. We could certainly have a composition consisting entirely of chords, even chords to be sounded staccato, thereby serving to mitigate the "melodic" connectedness among them. But suppose the following case. Let every single note scored by Mozart for every particular instrument and individual voice in the opera *Don Giovanni* be sounded simultaneously, each instrumentalist and singer in an enormous "orchestra"¹⁶ and cast of voices sounding, on a single beat, only his one assigned note. Would this be music? Lively speech is an analogous case in that "temporal" succession seems to be no less intrinsic to it, but intrinsic in a disanalogous way. It is not just that without there being a temporal succession in the words we hear we should hear mainly a babble. And it is certainly true that the temporal succession that at once separates and joins the words of poetry when read aloud joins and separates them in such a way as to allow us to speak of the "melody" of the poetic line. Listening to the reading of poetry at such a remove as would prevent our "hearing" even a single word, *as a word*, would underscore for us the melodic character of poetry and reveal the human voice, even in speaking, to be a musical instrument. What I mean is this: notes are joined and separated in a melody in an at once analogous and disanalogous way compared to that in which words in lively speech-acts are; and this is because the "connectedness" of the words of a speech-act, while being melodic and hence *temporally* successive, are at the same time "successive" in a way

governed by the suasions of syntactical rules, somewhat less by grammatical rules, and even somewhat by semantical rules. Where the words will appropriately stand in relation to one another in the "temporal" succession of words in a speech-act is not governed alone by their sonant qualities—except perhaps in pure poetry, i.e., in poetry that attempts to become melody pure and simple—but by their meaning *as governed by the syntactical rules* we are wont in practice to follow.

V

From the outset it has been apparent to us that some clarification is called for of the question as to whether and, if so, how time may be said to enter into logical relations. How are we to construe words such as 'anterior to,' 'posterior to,' and 'consequent'—which in some contexts make a clear allusion to temporality and change—when they are used to specify *logical* relations? For example does 'anterior to' mean "(logical) ground and antecedent of," with complete neutrality as to anteriority or antecedence in *time*? Does indeed the very ambivalence between frank implication with the temporality of the world and atemporal "logical" sense in the meanings of 'anterior,' 'posterior,' and 'consequent' attest to the parasitism and radical grounding of formal logic upon the integrity in time of the intentional mindbody—even when these relations have come to be expressed in an artificially devised calculus without tenses? In short: must a *logical* relation be strictly an atemporal, eternal one; and what are the implications, if we were to conclude that it need not be?

This puzzlement was provoked by equivocations in some of Polanyi's arguments. In referring to 'premise' as a logical category, in defining 'premise' as "an affirmation" (*P.K.*, p. 161)—as, that is, something that is implied as having been or as actually being *affirmed* by someone, rather than as simply one "verbal" formula connected by explicit formal rules in an atemporal notational system to another—and then in declaring that it therefore must be "logically anterior to that of which it is the premiss" (*P.K.*, p. 161), he appears to put the normal uses of familiar words in the discourse about logical relations out of focus. To speak of a premise as an "affirmation" is clearly to suggest that it is something that *someone in particular* has affirmed or is affirming, that it is a locution having an actual personal assertional backing. To speak of my "affirming a premise" and

“drawing a conclusion” is to propose a picture of *an event taking place in time*; very different from speaking of the *logical* relation that holds *as such*, independent of *any* event, between a premise and a conclusion. This led us to concede that Polanyi is unwittingly using these familiar notions in unfamiliar ways; but that unwitting or not these uses are by no means without philosophic import.

We have already observed, in exploring some of our accounts of seeing, the many different ways in which the concept ‘time’ can be made to function. We have even discovered that in one very abstract description of the structure of vision and the visible there *is* no time, since all particulars are depicted as being simultaneously co-present in an eternity—one consequence of which is that the relations among these particulars, in this version, are *necessary*. And we have conjectured, too, that fundamental words such as ‘form,’ ‘gestalt,’ ‘order,’ ‘meaning’—as well as ‘necessary’ and ‘contingent’—might have very different uses, if those uses were governed, on one hand, by the picture of seeing, given in our most abstract version above, and which admitted temporality not at all; and, on the other hand, our pictures of hearing—the hearing of music, the hearing of speech—to which temporality seems intrinsic. ‘Necessary’ and ‘contingent’ are notions that are clearly essential for expressing the status of logic and logical relations. If their force varies according to whether their use is primarily subject to the visual or to the audial *picture*—thereby introducing the possibility that the sense of ‘time’ may co-vary with them variously—then an investigation of the changing uses of ‘necessity’ and ‘contingency’ bears upon how we shall answer the questions originally provoked by Polanyi’s equivocations.

If then we are to elucidate the subtle but decisive ways in which our fundamental words may function under the sway of different pictures, and if we are to do so without becoming unwittingly trapped in our very discourse in a single such picture, we must pursue these subtleties a step further.

Let me then press the inquiry by adducing another example. Imagine a *speech* “chorus,” comprised of sopranos, tenors, altos, and basses. To each section of this chorus let us assign a different one syllable word: say, fan, tape, ox, got.

I have chosen these words “off the top of my head.” There may be some deep psychological significance, an arcane cipher of my psyche, a meaning, motif (as I would prefer to call it) displayed in what I am choosing to take as a random association of words. Our mindbodily *demand* for motif is so

powerful that we have an extremely low tolerance for the unmeaning, the incoherent, the amotival. If meaning and motif are not familiar and patent, then we will find them in the cryptic, hermetic, or obscure. What I need to do in the present illustration is to juxtapose real words from English —nonsense syllables will not do—that will be heard, when simultaneously sounded, in a way analogous to that in which notes in a chord are heard, similarly sounded; yet at the same time may be heard as *disanalogous*, since they are words in a language and not notes in a scale. By setting up a kind of “cognitive dissonance” we may be able better to grasp the difference between the motif that, in a temporal succession, connects notes in a chord, played both simultaneously and arpeggio; and the motif that, in a temporal succession, connects the words in a speech-act. All of this I hope will move us toward answering the question: what do we mean when we say that notes in a heard melody are temporally related?

But to return to our contrivance. If a downbeat were given and members of our speech “chorus” were simultaneously to *sound*—but not utter—the words “fan,” “tape,” “ox,” and “got,” it is conceivable that the co-temporaneous sounding of them would evoke from our ductile mindbodies a resonance analogous to that that would be evoked by the musical chord C, E, A#. But this analogy could hold only on condition that the sounds were *not* heard *as being any part of language*, any part of a possible speech-act. The very basis upon which we should be mindbodily struck by the analogy is that their mode of coherence for us, their style of “hanging together” in time, be like that of *notes in a chord*, not like that of *words in a speech-act*. We would not resonate to the simultaneously produced sounds as merely sonic, if we happened at the same time to hear them as words. The *modality* in which a simultaneously sounded musical chord addresses its motif to our mindbodies is different from that in which simultaneously sounded words address theirs, however analogous they may be. Their *motifs* are different.

This becomes even more obvious if we imagine our “chorus” sounding our four words in arpeggio. That logos, shape of meaning, form of connectedness that is manifest in the musical arpeggio, like a kind of sonic explication of the chord, is quite missing with our verbal case. In the latter, the sense is present, if at all, as absent; present as a syntactical default and anomie.

What does it mean then to say that the notes in a heard melody are temporally related? Are we ready yet to answer this? Not quite, I think.

Let us animadvert upon St. Augustine’s remark about the difficulties of explaining time “to one who asketh.” He asserts that at one moment he

knows what time is, knows, that is, before anyone has asked; and then asserts, being asked what it is, that he does not know. If we take the remark to be a serious philosophical asseveration rather than mere wit, it appears that with regard to time, at least, Augustine claims to know more than he can tell.¹

Without addressing the import of a generalized version of this claim, I would like to comment upon its application to our knowledge of time. And what I shall argue is that “time” is the very radix of our mindbodily being; that we do indeed know what it is—or perhaps better, *that* it is—“know” it anterior to *saying* what it is, “know” more immediately than we know anything, “know” before being asked what it is; that this “knowledge” that is a “motif” imbuing our most unsearchable wit in the etymology of words like *intend*, *tense*, *portent*, *attend*, *detente*, *tender*, and *tonic*. The phylogenetic and ontogenetic antiquity and radicality of our knowledge of the “temporality,” the “intentionality” of our mindbodily being lies hidden—for reflection (“If I wish to explain it to one that asketh, I know not”)—in the very *tendons* of our language, that reality (language) that while wholly human is yet somehow no man’s making and that was on the scene when we arrived—we as mankind, we as you and me. The temporality of our being appears and is “known” as the from-to structure of the tonicity of our living mindbodies and of their motility. And these are modulated into the “temporality” apart from which words like *tense*, *attend*, *tender*, and *portent* would be without force. Without this basal “temporal” *distension* there could be for us no such power as attending, attention, that is, *stretching forward*. In short, we carry this “temporal” *arché* about in the sinews of our language and in the sinews of our mindbodies that had them first. This is why we have a sense of what time is, if we are not asked, and do not know, if we try to say.

Without this primordial *whence* of our tonic mindbodies—‘whence’ meaning both “when-from” and “where-from,” being happily equivocal as between “space” and “time”—there could be no space and no time in our more familiar derived senses of these concepts.

What is it then that happens when, being asked, we undertake to say what time is? Forgetting what we “know,” we conduct our inquiry into the form of “time” (which as we have seen, is indistinguishable from eternity) in which I unchangingly endure throughout the course of my jog; or we conduct it into the form of “time” within which the causal integration of my physiologically analyzable parts takes place; or into that within which my running style evolves and is manifest; or into that within which a motif

unfolds, "shapes" its particulars and has its being; or into some other reflected derivative of what we primordially know. When we forget what we "know," these analyses become problematic, since all these "times" are "phylogenetically" and "ontogenetically" derivative from and modulations of this radical temporality of our being.

What does it mean then to say that the notes in a heard melody are temporally related? It means that the notes with which the melody begins *pretend* the notes that follow; that the notes that follow *retrotend*² the notes with which it begins. This "time" that separates and joins the notes of a melody is a derivative of the archaic temporality of our mindbodily being; even as each "moment" of my existence as a mindbody, viewed from "within" my unreflecting self, *pretends* its next existential "moment"; and that "moment" *retrotends* the prior. Except that my existential relation to this *pretension* and *retrotension* is more intimate and immediate than that which has been mediated in the melody, and hence is less readily remarkable.³

When this is said a surprising possibility becomes evident. You will recall that in summarizing the nature of what sight sees, subject to that picture of it that was abstracted from our acts of seeing, I said that it is *static, finite, determinate, self-contained, and complete in itself*; and that as such it provided the "experiential" basis for our distinctions between eternity and time, being and becoming, essence and existence, necessity and contingency. The only one of these summary terms not applicable to *at least some melodic cases* is the word 'static,' albeit their weight is quite changed.

Put on your stereo a recording of the First Prelude in c from J. S. Bach's *The Well-Tempered Clavier*, Book I. Sit back and give yourself over to it. The "time" required for it to be heard is, say, three minutes, thirty-eight seconds, as registered on the stop watches of the recording studio. *This* is not the "time" within which the Bachian style evolves and exists; nor is it the "time" in which the melody, the motif unfolds and *is itself*. But since the earlier notes *pretend* the later and the later notes *retrotend* the earlier, if we will allow the words to acquire an altered but analogous sense in this depiction of hearing, then we may say of the First Prelude when it has been heard entire that it, too, is *finite, determinate, self-contained, and complete in itself*. We cannot however say that it is static. In fact, this Prelude is the perfect *musical* expression of the nature of God's *dynamic* fidelity, verbally given as: "A thousand years in Thy sight is as the watch that endeth the night."

It is these very qualities of this composition that enable it to evoke in us a transcendent sense of repose and wholeness, in sharp contrast with, say, Chopin's Nocturne No. 13 in c Minor, Opus 48, No. 1, in the midst of whose tendering "linear" tranquility an irruption of angst occurs, inspiring Eugène Delacroix to say of Chopin's music in general that it is "like a bird of bright plumage fluttering over the abyss."

Aleatory music on the other hand, music, that is, consisting of sound sequences arrived at by a "gamble," a random "order" (?) produced by "throwing dice," drastically departs from the *finite* melodic case above in just the right way to underscore the in-finite, the in-definite, the un-completed quality of the heard world.⁴ Eric Newton has suggested this contrast between the possibilities available in a visual medium and an audial one when he says, commenting upon the Andante movement of Brahms's Symphony No. 1: "[There is in it a passage that is] syncopated, restless, diffuse, and accompanied by dark mutterings in the bass—surely the musical equivalent of Altdorfer's tangled forests, *yet richer in emotional content*, if only because music, existing as it does in time, can afford to develop romantic growths out of a classic germ. Painting cannot perform this miracle."⁵

There is however a far profounder sense in which heard music can be the vehicle of an infinitizing energy, the Bach prelude case aside. Appreciating this sense will enable us to grasp the force of the remarks by Kierkegaard's pseudonymous aesthetical writer of "The Immediate Stages of the Musical Erotic," Author A, in *Eiøher/Or*.⁶ Beyond shedding light upon the visual-audial contrast and the contrasting pictures drawn respectively from the description of each with their logical import for our uses of our fundamental words—this import that is our present concern—Author A, almost in passing, suggests that this contrast is a cryptographic lens by means of which we can exegete the text of antiquity, the Middle Ages, and of modernity.

Let us remember that all of the sensible particulars that jointly comprise the scene before me in my description of vision are depicted as sensually simultaneously co-present in (visual) space with one another and with the totality that they jointly constitute. In saying this I meant that the visual particulars were simultaneously "before" my eyes in a sense in which it could *not* be said that the notes in a heard melody are "before" my ears—or to be quite precise, the particulars of the heard melody are not "before" my ears *in the way in which* those of the visual scene before me are "before" my eyes. Whatever motival integration may occur in the "time" appropri-

ate to it among musical notes such that I can licitly claim to “hear” the *whole* of the First Prelude of the *Well-Tempered Clavier* as “a thousand years” which is like “the watch that endeth the night,” I cannot claim that each note of the prelude is “before” my ears in the same way that the sensuously co-present particulars of a seen sight are “before” my eyes.

There is then a sense in which music is always outrunning its own sensuously present particulars in a way that is not the case with sight in relation to its. Author A, propagating his views by analyzing Mozart’s seducer, Don Giovanni, as the sensuous-erotic genius that only music with its infinitizing energy can mediate, observes: “So it is . . . with music: That which really should be heard, constantly emancipates itself from the sensuous.”⁷ What is it that should be heard? “Restlessness, tumult and infinity.” Since music is the only conceivable medium for the mediation, that is, for the bringing forth and “embodying” in the world of the sensuous-erotic genius of Don Giovanni, he therefore strictly does not exist—in that sense of ‘exist’ appropriately applicable to a *person in history*. For “music has, namely, an element of time in itself, but *it does not take place in time* except in an *unessential sense*. The historical process in time it cannot express.”⁸

This leads A to conjecture that in superordinating music, thus understood, over all other media excepting only language (and I should add, in conjointly embracing a picture of man’s situation in which vision is conceived as disembrangled from the world’s immediacy, ambiguity, and disarray through the invention of the infinitizing Renaissance gaze, under the tuition of the idea of a media-transcending, personal God) “Christianity brought sensuousness into the world.”⁹ It leads A also to suggest that music is the Christian art inasmuch as “the ear is the most spiritually [i.e., *pneumatically* as opposed to *psychically*]¹⁰ determined of the senses”; and because aside from language, “music is the only medium that addresses itself to the ear.”¹¹

That other medium that unfolds in time, namely, lively speech-acts, also, but in a different sense from music, outruns its sensuously present particulars. In the case of language, “the sensuous is reduced to a mere instrument and is thus annulled. If a man spoke in such a way that one heard the movements of his tongue, he would speak badly. . . . Language becomes the perfect medium just at the moment when everything sensuous in it is negated.”¹²

Why then, we may ask of A, do we not similarly hear “restlessness, tumult and infinity” when we hear lively speech, since it no less constantly

emancipates itself from its sensuous particulars? A does not tell us. But he leaves us a clue. He says that "music does not take place in time *except in an unessential sense*,"¹³ and adds, "The historical process in time it cannot express."

Why then do we not hear "restlessness, tumult and infinity" in lively speech-acts, their present sensuous particulars being negated as also with music? Because among the formal resources present in language, but lacking among those of music, are, to name only some, demonstrative and personal pronouns and egocentric particulars, none of which acquire a sense except as they are existentially bonded to *some particular spatiotemporally determinate, actual speaker*; and, further, a system of tenses and the indicative, subjunctive, imperative, and optative moods, whose sense is *also* parasitical upon the existence of a privileged actual speaker, by means of which he and what he says are situated by reference both to time (history) and to the categories, actuality/possibility.

These resources of language, and, trading upon them, its semantic dimension going beyond the resources of mere reflexivity, continually recall the temporally ordered medium of language back to the existentially actual speaker's words with their semantic reference to his world which otherwise would like music be given to outrunning its own sensuous particulars. And it is precisely by these means, too, that language is able to express the historical process in time, to *take place in time* in an *essential* sense. By being bonded to the actuality in time of my existing mindbody, the contrasts among the past imperfect, the perfect, pluperfect, and future perfect tenses provide for me the possibility of using the concepts 'act,' 'choose,' 'decide,' without which history—the expression in language of the historical process in time—would be impossible.

Though moving along rather different lines, in comparing the differing ways in which "time" appears in a melody and in a lively speech-act we came to this conclusion above. We observed that notes are joined and separated in a melody in ways that are at once both analogous and disanalogous when compared to that in which the words in a lively speech-act are. And it was argued that this is so because the connectedness of the words of a speech-act, while being "melodic," hence temporally successive, are at the same time "successive" in a different mode, successive, that is to say under the sway of syntax, grammar, and even of semantics. Where (when?) the words of a speech-act will appropriately stand in relation to one another in their "temporal" succession, it was held, is not governed alone by their sonant qualities, but by their meaning as determined by

the syntactical rules which in our practice we are given to observing.

Of the picture of the audial world provided by the Bach Prelude it was possible to say that what is heard in it is *finite, determinate, self-contained, and complete in itself*. We noted that even so it was emphatically not static. In the analysis afforded by Author A of the infinity and the world-transcending sensuous-erotic genius that he heard in Don Giovanni's so-called Champagne Aria, even though obviously it begins and ends and therefore achieves a completion and resolution for our Western ears, its constituent notes *can* be sung and played with such energy as to tear us away from these sensuous particulars and fling us "out of the world" into infinity and the indefinite, into an approximation of immediacy. Whether we take one or the other of these pictures of the audial world, we have no great difficulty in thinking of 'form,' 'order,' 'whole,' 'integrity,' 'reason,' 'motif,' 'meaning,' or 'gestalt' being subject to the "logic" of this picture. Indeed we have no great difficulty in thinking of *logic* as being subject to its "logic"—albeit the extent to which the aria is thought to strain in the direction of "restlessness, tumult and infinity" will be precisely the extent to which this picture will try the limits of meaning and logic. Therefore a fortiori there is no reason why we need acquiesce in the usually unwitting and uncritical drift of thought since the Enlightenment which, when it is being most self-consciously "philosophical," tends, on the contrary, to subject these concepts to the "logic" of the visual picture; even to make the concept 'logic' subject to it.

Let us now revisit the contrast between 'necessity' and 'contingency.' I have argued, as I abstracted a picture of sight more and more from the mindbodily activity of seeing, that the unique power of sight, in contrast with that of hearing, is to have "objects" before it every "part" of whose determinate surfaces, bounded by the frame of my open eyelids, is at once sensuously and simultaneously co-present in (visual) space with every other "part." The power of sight is the power to sense in an instant without temporal thickness an at once finite, static, and eternal (visually) spatial configuration. From this I concluded that not only do our distinctions between eternity and time, essence and existence, being and becoming derive from this picture of the experience of seeing, as Jonas has claimed, but that no less does our distinction between necessity and contingency. If this last claim is upheld, its import for our understanding of variant uses in serious philosophical discourse of 'logical,' 'imply,' 'prior,' 'anterior,' 'consequent,' and the like will be more than slightly consequential.

From the etymology of the word 'necessity' which showed its root mean-

ing to be “not to go,” “not to proceed,” “not to withdraw,” “not to retire,” I concluded, following the etymology, that we should have to say of the relations among the particulars of our visual field, as depicted, that they are *necessary*, the very opposite of *contingent*. Their status in relation to one another does not happen or come to be, but *is*; they are in the relation of being unmovingly, unchangingly, eternally *present with* one another; and therefore we derive our conception of “necessary relation” from *this* picture of sight. What sight sees, in this picture, then, is *finite* and *static*: strictly measured, defined subject to explicit *regulae*, exhaustively explicit and unchanging, in the way in which we are given to supposing the relations among the terms of an algorithm, an arithmetical system or a logical calculus are, quite prescinded from praxis and the temporality of our mindbodily being.

The presentation of our picture of hearing used melodies and speech-acts as models for analysis. We saw that when we think of a musical composition that can be performed in a relatively short time, as with Bach’s First Prelude of the *Well-Tempered Clavier*, we can say of it also that it is finite, determinate, self-contained, and complete in itself. These descriptive terms however have a sense that is determined by their application to a musical, *hence temporally extended*, rather than to an atemporal spatial model. The *musical* model when heard has a temporal thickness greater than that of a mere instant, for music as heard, for all of its capacity to resolve itself through time into a finite, temporally complete whole, cannot exist in the “instant” which is, as we saw, but a slice of dead (visual) space. But we also discovered that we could not characterize the world we hear as static—at least in that sense of ‘static’ applicable to visual space and its spatial entities.

The essence of the objects of sight, according to our picture, is static; that of the “objects” of hearing is dynamic.

But more than this, we discovered that all of the particulars in my visual field are sensuously simultaneously co-present, that is, they are “before” my eyes in the same instant in a slice of dead (visual) space; whereas the notes of a heard melody are not sensuously co-present, that is, they are not “before” my ears in the same instant, in the above sense of ‘instant.’ In both heard music and lively speech-acts the “sensuous is reduced to a mere instrument and is thus annulled”; and in the case of music, “that which really should be heard,” namely, “restlessness, tumult and infinity . . . constantly emancipates itself from the sensuous.” And this we saw to be the case even with the Bach Prelude whose potentiality for giving way to

restlessness and the tendency toward infinity, seeing that as *heard music* its sensuous element is capable of being reduced to a “mere instrument,” and thereby of being annulled, is mitigated at least by this composition’s capacity to resolve itself through time into a finite whole. In fact, such a capacity can be claimed even for much more complex and, in the appropriate sense of ‘time,’ *protracted* musical compositions as heard.

Aleatory “music,” that is, tonal sequences whose “organization” (note that ‘organization’ makes a most equivocal appearance here) is produced randomly, would appear to be the case that at once proves and illuminates the rule governing the music of the eight-tone and now even the serial twelve-tone scale, increasingly familiar to our ears; and hence for which there is the possibility, in these tonal schemata, of musical closure.

Mozart claimed to “hear” in a *totum simul* the whole of a symphony by which his inspiration was visited, rather as, when lightening flashes over a darkened landscape, one sees the suddenly lighted scene as a whole, but also sees within it every single blade of grass as itself. Other composers¹⁴ have said similar things; and surely the difference between you and me, on one hand, and a gifted orchestral conductor, on the other, is the possession by the latter of a capacity for having “before” him at every “moment” of its playing the ultimate resolution of the composition that he conducts. In claiming this, we are enabled to go on to claim of the music as heard that the earlier notes of it *pretend* the later, the later notes *retrotend* the earlier; that therefore the relations of the earlier and the later are not those of cause and effect, that nevertheless the constituent notes of the heard music, *as susceptible of resolution in time into a finite whole* (in those senses of ‘finite’ and ‘whole’ appropriate to their application to a temporal gestalt) are bound together, not by *necessity* such as obtains in a dead slice of (visual) space, but by a *motif*: a lively temporal configuration, habitable by the mindbody, the particulars of which happen in time (as does also the configuration taken as a whole), but the occurrences of whose particulars are neither causally related nor mutually radically underivable, as with cases of notes randomly succeeding one another. Their relations are, in other words, *intentional*, hence temporal, therefore contingent. *Necessary relations*, as our tradition would have it, immured as it is in the superordination of the visual picture, obtain only in “eternity”; *contingent relations* come to be and cease to be in “time,” in each of several senses.

What we need to do here, before proceeding, is further to explore in opposition to one another the etymologies of ‘necessary’ and ‘contingent’; to recognize that they have historically changing logical matrices; and to

suggest (presuming to comment upon them only at that length appropriate to the purposes of the present inquiry) what some of these have been. For it is as yet far from clear what the “logic” of ‘contingent’ may be.

‘Necessary’ and ‘contingent’ have functioned as contrasting concepts in philosophical discourse for a very long time. As we already have ample grounds to suspect, large philosophical questions turn upon this contrast: questions having to do with our ways of conceiving, indeed, of being able to conceive, of the world.

Ne + cedere, we have seen, radically means: not to go, not to proceed; not to go away, not to withdraw, not to give ground, not to retire; and by transference, to be unavoidable, inevitable. I have argued that the “experiential” source of this concept and of its contrasting one is the suffusion of our imaginations by a picture of sight abstracted from the temporal thickness of our actual mindbodily feats of seeing. I have claimed that in this picture all of the particulars depicted as being seen are sensuously simultaneously co-present with one another in a dead slice of (visual) space; therefore, in this picture, nothing goes, proceeds, withdraws, or gives ground; hence, the relations among these particulars, being co-present in a dead slice of (visual) space, are *necessary*.

Without presuming to deal with a genetic psychological account of the process, I shall suggest that once the imagination is imbued with this picture, we come to be possessed of some of our unique human powers—to distance ourselves from the rummage of the sense-manifold, to achieve objectivity—but also to suffer the alienation, both in our reflected and unreflected life, from our other senses: the price we pay—perhaps there is a “doctrine of the fall” in this—for this first Copernican Revolution.¹⁵

Further, once our mindbodily being in its transactions with its world becomes subject to the sway of this picture, the entire economy of our discourse is altered by the investment of a repertoire of new conceptual possibilities.

The case of *contingere* seems somewhat less clear-cut than that of *necedere*. As we saw, in its transitive form *contingere* radically means “to touch with,” “to border on,” “to reach,” all of which seem to affiliate it with taction, the activity of touching, that is, with reaching out (in order to touch) and thereby (coming) to border on—where “space” is *tactilely, proprioceptively, kinesthetically, and prehensilely* rather than *visually* depicted.

If however we oppose *contingere* to *necedere*, what immediately strikes us is its intransitive forms: to happen, to befall (usually of good luck). And while this highlights the opposition of *necedere* (not to move, change, retire

[happen]) to *contingere* (to happen, to befall) we are left with a nice ambiguity between “happening” and “happening by chance”;¹⁶ between a coming to pass, a coming into being, a taking place that is *indifferent* as to whether or not it is subject to a motif; and a “happening by chance” that clearly is not subject to a motif, but is instead taken to be random, radically underivable from an antecedent.

The *Oxford English Dictionary* gives for ‘contingent’ the following, underscoring the ambiguity already referred to: 1. In contact; tangential (1703). 2. Liable to happen or not, M.E. which it illustrates with “if death were only contingent, and not certain” (1683). 3. Happening or coming by chance; fortuitous (1613), which it illustrates with “by various local and contingent events” (1799). 4. Not determined by necessity; free (1796), which it illustrates with “If human actions are not contingent, what think you of the morality of actions?” 5. Subject to accidents (1745), which it illustrates with “the contingent nature of trade.” 6. *Metaphysics*. True only under existing conditions (1588); that exist in dependence on something else (1785); nonessential (1628), which it illustrates with “contingent matter (in Logic): the subject-matter of a proposition which is not necessarily or universally true.”

Let us, by reference to the two models we have been employing, now ring some of the changes on uses of ‘contingent,’ as given above, namely, by reference to melody and lively human speech, of both of which we have said that they are governed by motifs: a melody by the motif of the scale and key signature in which it is written to be sounded and by the motif of the intentions implicit in its composer’s inspiration; a lively speech-act by the motif of the natural “poetry” (melodiousness) of the sonant qualities of sounded words, the motifs of the syntax, grammar, and semantics of the language being spoken and the motif of what it is that the speaker intends to be saying.

As our musical case, let us take the tonal sequence: C, E, G, C/E, G, C. These are in fact the first seven notes of Bach’s First Prelude in C of which we have already spoken. Clearly the hearing of them or even just the “reading” of them from this page would disclose to anyone trained in the eight-tone music of the West that they are a melody and are therefore ordered by the motifs of scale and key signature and of the intentions implicit in Bach’s musical inspiration.

Clearly the notes “come to pass” in time rather than merely existing as simultaneously co-present in a dead slice of (visual) space. To such an extent they are dynamic as opposed to static; nor are they sensuously

simultaneously before our ears as are the particulars before our eyes in the picture of sight we have produced and examined. Therefore we cannot then say that the relations among the heard notes are *necessary*, at least not in that sense of ‘necessity’ associated with the visual case.

Are the notes then *contingently* related? And if so, in what sense of ‘contingent’? As I am hearing them, I find no difficulty in imagining that the sequence E, G, C, will *not* follow the earlier sequence, C, E, G, C, because I can readily imagine the performer, having struck the key that will sound the second C in the first sequence, suffering a massive hemorrhage of the brain, instantaneously losing all motility and therefore never coming to strike the keys that would have sounded E, G, C. It does not significantly alter the case to argue that the contingency in question has to do with whether or not the movements of someone’s fingers on a piano keyboard will be followed by other movements of those fingers. The relations among the moving fingers, insofar as their movements are dependent upon the continued integrity through time of the performer’s body, are indeed contingent.¹⁷ Still it makes perfectly good sense to imagine that the tones¹⁸ E, G, C will not follow the already heard tones C, E, G, C. To do so is to take the relations among them to be contingent. But what is the sense of ‘contingent’ here? Is it not the sense of definition 2 above: Liable to happen or not—whether we speak of sequentially moving fingers or sounding notes.

Now however let me imagine actually hearing a musical composition being performed on the piano. Let it not be the Bach Prelude or in fact any piece I have ever heard before. But let it be composed in C major in an eight-tone scale. How is my mindbody moved by what I shall hear?

My ear is “tuned” to C major, to an eight-tone scale, to a substantial literature in the Western musical tradition. As I intently and mindbodily attend to this piece of music which I have hitherto not heard I have an acute sense of the *contingency*, of the coming to pass of any given tone following any other, of their sequence being subject to no necessitation or compulsion. The tone I find myself waiting to hear, before the fact of its sounding, tonic mindbody alert and profoundly intentional, is not some particular tone—though I may “lean” a certain way in what I expect—for I would “think” to myself, were I given to such foolishness: “The next note after all may be any of a number.” And I should have a similar “thought” after the fact of its sounding: “How like Beethoven,” I might say, “to seduce me musically to expect one resolution, only then to enhance the interest of his work by dashing my expectations in making another, an

outrageous other.” Yet even to say this is to listen to the music believing that it might move in any of several directions, which is to say that the notes of this hitherto unheard piece are for me, *as I hear it*, contingently related as the particulars of the visual scene—which is static—are not.

“But,” it might be rejoined by you, “this contingency is only *relative*: relative to the fact of its never having been heard by you; relative to the fact that this, for you, novel sequence of tones, this temporal gestalt unfolds in time, so that you hang on every note, waiting for its successor, that being the nature of a temporal gestalt. You need not hang on the particulars of what is (novelly) *seen* because in our picture the particulars are all sensuously simultaneously co-present. Even in a novel sight, according to our picture, there is nothing *before the eyes* to anticipate. It’s all there at once in a slice of dead (visual) space.

“But these are the least of your troubles,” you continue. “You claim that the notes in the hitherto unheard piece are *for you, as you hear it*, contingently related. Clearly you have no problem, if you mean only to claim that you hear them sequentially and dynamically in time, rather than simultaneously and statically in a slice of dead (visual) space. But this is a far more modest claim than you appear to wish to make. In stipulating the terms of the example, you specified that the novel piece of music should be imagined as composed in C major, in the Western eight-tone scale. And, too, you laid claim to an ear “tuned” to a substantial literature in Western music. In saying this you have set a trap for yourself, a trap which, as you will see, will prevent your validly claiming that the notes of the hitherto unheard piece which, as you hear it, *sound* as if they are contingently related, are *in fact* so related. They are in time, rather than in a slice of dead (visual) space, and you *hear* them in time; therefore their relations are dynamic rather than static. But,” you say, “their relations, for all of that, are only *relatively* contingent.

“For the sake of making my point,” I can hear you say, warming to your argument, “let me do some stipulating of my own. Take it for granted that the piece is being played, that the performer will at least survive the playing of it and play it without a single mistake, so that there is a virtual certainty that the constituent notes as sounded will stand in the sonic universe of sequential tones in a ‘necessary’ rather than a ‘contingent’ relation. Within the terms of the stipulated case, though it all unfolds in time, there are absolutely no surprises, I’ll even say, no contingencies: the piano will not fall apart, nor will the performer, etc. Now I have no interest in the above stipulated case. In fact, I put it all together only that we might

ignore it, in order to raise the question of contingency at a different and more interesting level.

"Can you say that the notes in themselves of this hitherto unheard piece are for you *as you hear it* contingently related? For remember that even this novel composition is subject to the motifs of its key signature and the eight-tone scale?"

"Very well," I rejoin. "To this I can readily say: yes, they are. But," I will add, "I begin to see that 'contingent' may be opposed to 'necessity' in a number of different ways. You seem willing to allow the use of 'contingent' only in cases where its sense would be *absolute* (whatever that may mean) when opposed to 'necessary.' I, on the other hand, am willing for it to have an, as you have called it, only *relative* force over against 'necessary.' Allowing this force will underline for us the contrast between, on the one hand, the *necessity* derived from our picture of *seeing*, where all particulars are sensuously simultaneously co-present in a dead slice of (visual) space and, on the other hand, the *contingency* among the particulars with our picture of *hearing* where all is temporality and dynamism. Subject then to this clarification, I can say that being governed by a motif, in any of the above senses, does not entail that the relations among the particulars of a musical composition, as heard, are eternal, inevitable, unavoidable.

"But," I say, "let me return to what you identify as the concession I make by which, in your view, I have entrapped myself: viz., in stipulating that the previously unheard piece of music should be one composed in the key of C major, in the eight-tone scale. Neither the key of C major nor the eight-tone scale are themselves musical compositions. Even if our composer of this hitherto unheard and novel piece of music were strictly limited in his composing to the one key, C major, in the context of the familiar eight-tone scale, if, that is, there were no options, no contingencies over which he exercised sovereignty wherein questions of key signature and tonal schemata were concerned, it would still be the case that the act of composing the previously unheard and novel piece of music, under the sway of the motif of the key and tonal scheme and of his musical inspiration, is an act of exercising a practically infinite number of choices among contingent possibilities. The reason therefore that I had an acute sense of the *contingency* (in the sense of their sequence being subject to no necessitation, no compulsion) of the coming to pass of any given tone following any other tone is that, as listener, my mindbody itself subject to the motif of the key and tonal scheme stipulated, I was *in listening* faced with the same contingent possibilities as the composer had been *while*

composing. In addition therefore to the temporality and the dynamism in the musical world there is really the possibility, *even subject to the motif of key signature and tonal scheme*, that a given note is 'liable to happen or not' following any other given note in an as yet uncomposed and novel piece of music; or is 'liable to be heard or not' in a hitherto unheard and novel piece."

"Brilliant!" you reply. "Such energy and ingenuity to make a point I readily concede: composers exercise sovereignty over really contingent possibilities; really *contingent*, that is, *relatively* speaking. I notice you did not meet my challenge in that matter."

"That may well be because I do not understand the challenge," I rejoin. "You seem to grant that my acute sense of the contingency of the heard order of the hitherto unheard piece of music is real; that the composer's acute sense that he is exercising sovereignty over contingencies is real; even that, his acute sense apart, there are real contingencies from among which he must choose. Why are the senses of 'contingent' as they are used here only 'relative,' as you seem to insist?"

You reply: "I don't know whether you argued thus deliberately to mislead me by a sophistry. But at least you have misled yourself. In your argument above you used at least three words or phrases which, because of equivocations, have confused you and might well have confused me. These terms are 'novel,' 'practically infinite,' and 'given note.'"

"Let me elaborate. When you first stipulated the conditions under which, for the sake of keeping matters controllably simple, a piece of music hitherto unheard by you would be composed, you said of this piece simply that it was hitherto unheard (I understood you to mean, 'by Poteat'). I have no problem with this, of course. For all I know, you may never have heard Handel's *Concerto for Viola and Orchestra*, even though it's been in the literature for the viola for well over two hundred years. Indeed, I believe the musical literature of the West is full of such relative contingencies, namely compositions that you could have or could not have heard, even though, as you have claimed, there are many in it that you have heard.

"But then as the argument developed you said: 'It would still be the case that the act of composing the previously unheard and novel piece of music. . . .' Now that word 'novel' changes—or at least confuses—everything. Of course I grant you that this imaginary piece of music may be both 'hitherto unheard' and 'novel,' if we mean by 'novel' no more than that nobody, subject to the motif of the eight-tone scale in C major, had previously *scored* this piece of music; if we mean in other words that it is *relatively* novel."

Poteat: "There is that word 'relatively' again. What on earth do you mean by this? Put your cards face up on the table."

You: "O.K. Let me refresh your memory as to your stipulations. You specified the key of C in the eight-tone scale for this piece of music we would imagine. Now let's not bother to compute all of this; and, too, let us forget that the music of the Western tradition, even that in the eight-tone scale alone, has variable resources and is capable of being complex in ways not even mentioned here. The fact is that even though a novel composition is conceivable within your stipulations in the *relative* sense (in the sense, namely, that no composer has yet in fact scored this particular piece), there can be no novel ones in the *absolute* sense.

"What I mean is this. There is a finite number of notes in the eight-tone scale. Now, to be generous, I'll allow the upward and downward range of the octaves on this scale to be the highest and the lowest note audible by at least one pair of human ears. This means that there must be a finite number of possible combinations and permutations of notes in this scale in all octaves within the audible range and in all keys, sharps, flats, and naturals. This means, if we take our stipulated case to be the limits of musical possibility, that there can be no absolute contingency within it. Everything within these limits of musical possibility is necessary, eternal, inevitable, unavoidable, fixed, determined, finite, admitting no options.

"Saying this is of course not at all the same as saying that there is no difference between our picture of sight and our picture of hearing; that nothing happens in the first because all of the particulars are sensuously simultaneously "before" the eyes and, equally, that nothing "happens" in the second because all of the particulars are sensuously "simultaneously" "before" the temporally distended mind or the memory or the imagination or whatnot. It is however the same as saying that in the picture of hearing affiliated with the musical case, even though things *happen* in this dynamic world, nothing happens in an *absolute* sense.

"Stasis, repose, even a kind of comforting inevitability—who can feel otherwise, listening to the Bach—are achieved within the dynamic, fully temporal gestalt of the First Prelude in C because the musical progression within which you and I have a *sense* of the (relative) contingencies and within which Bach composed by exercising options among these very real (relative) contingencies is at each moment subject to the motif of the key of C and the eight-tone scale. *Repose* and *necessity* are expressible in this music only *because* there is no absolute contingency. By the same token, though it would take a much longer, though finite, time to perform it, we could

imagine a composition that in fact exhausted every single possible combination and permutation of the notes of our stipulated eight-tone scale, which in other words rang the changes on this scale.¹⁹ While it would certainly take a long time to perform this curious piece of music; and while the temporality is essential to its being music; those musical possibilities that will have been actualized in the composition and playing of the music are finite in number and “eternally” given as the motif: the eight-tone scale.

“In a sense, I’ve already made my point,” you continue. “But just to illustrate the ways in which we can set traps for ourselves, let me look at your phrase ‘practically infinite.’ You say of your imaginary composer that, in composing, while subject to the motif of the stipulated key and tonal scheme and of his musical inspiration, he is ‘exercising a practically infinite number of choices among contingent possibilities.’

“Now of course I don’t disagree, as I’ve said. But the ‘contingent possibilities’ are strictly *relative* ones and you really concede the point unwittingly. For you say that the composer exercises a *practically* infinite number of choices. By this you can only mean that, if he were to choose to use every single possible combination of notes in the eight-tone scale, it would take him a very long time to actualize all of these possible options. But you do not say it would take him an *infinity* of time. If it wouldn’t, then he is, according to my view, only choosing among relative contingencies.

“But now there is a final phrase to consider: ‘a given note.’ This may put too fine a point upon it, yet I find the temptation to do so irresistible.

“You say, ‘There is really the possibility even subject to the motif of key signature and tonal scheme that a given note is liable to happen or not.’ Here, I understand you to be wanting to show that ‘a given note’ is contingent in relation to some other in the sense of contingent given as the second definition in the *O.E.D.*, namely, liable to happen or not. What needs pointing out though is that the ‘logic’ of the expression ‘a given note,’ that is, the sum of the rules set by you governing the use of ‘a given note,’ is established by the motif of the eight-tone scale; its conceptual context is the limits of this motif, as that of ‘a given card’ is, let us say, the rules of the game contract bridge. Therefore ‘a given note’ as defined in the context of your use could not equally be or not be a note in any conceivable tonal scheme whatsoever. *This* note you refer to, given the context of your discourse, could only equally be or not be *some particular note from some octave on the eight-tone scale*, with sharps, flats, and naturals, within an audible range as defined. Hence, ‘a given note,’ *any given note within the stipulated context*, can at most be a relative contingency when it is scored by the composer.”

At this juncture it is well to recall how it is that we have been driven along this course of argument before plunging ahead towards wherever it is taking us. Polanyi says in *Personal Knowledge*: "Our acceptance of what is *logically anterior* is based on our *prior* acceptance of what is *logically derivative*, as being *implied* in our acceptance of the latter" (p. 191; my emphases substituted for original). These novel, or at least unaccustomed, uses by Polanyi of "logical" concepts such as 'logically anterior,' 'logically derivative,' and 'being implied' arrested my attention as had analogous cases in his discussion of the premises of science, as when he says: "Beliefs and valuations have accordingly functioned as joint premisses in the pursuit of scientific enquiries. . . . But 'premiss' is a logical category: it refers to an affirmation which is logically anterior to that of which it is the premiss. Accordingly the general views and purposes implicit in the achievement and establishment of a scientific discovery are premisses, even though these views and purposes may no longer be quite the same as those held *before* the investigation was first seriously thought of" (p. 161; emphasis in original).

What was curious for me in these passages was the apparent conflation of usually distinct conceptual matrices. Language such as 'logically anterior,' 'logically derivative,' 'implied,' 'premise,' and the like invited us to think, conventionally, that logical relations, that is, atemporal, necessary (inevitable), exhaustively explicit and universally valid relations, were under discussion. And yet this impulse was immediately stayed by the presence of phrases such as 'our acceptance,' 'our (prior) acceptance,' 'beliefs and valuations,' where the context makes it clear that these are not meant to be atemporal propositional expressions, but are reports upon the actual existential, mindbodily "believings" and "valuings" of a scientist in the process of seeking, revising as he goes, coming to know and upholding his knowings with acknowledging affirmations; and by words such as 'affirmation,' 'purposes,' 'achievement,' 'establishment'; and most puzzling of all, if we try to read these passages conventionally, the words, "these views and purposes may no longer be quite the same as those held *before* the investigation was first seriously thought of." For, on the one hand, it seems to be implied that the connection being claimed to hold between the logically anterior and the logically derivative is a *logical* one, that is, an atemporal and necessary one; yet on the other hand, the introduction of the obviously temporal word 'before' suggests that it is not.

This led me to suppose that a different model of logic informs Polanyi's book at crucial places, however unwittingly, and to prom-

ise that an attempt would be made to display what this is.

That I might do this and lend the proposal some plausibility I have taken the argument, it may seem, rather far afield. First I claimed that there are many words, especially in philosophic discourse, that are fundamental in the sense that they variously serve to state or allude to the ubiquitous, rudimentary, and obvious fact and differing forms of the connectedness of things. Some of these I cited were 'form,' 'order,' 'whole,' 'integrity,' 'cause,' 'reason,' 'motive,' 'meaning,' 'gestalt,' 'logical,' 'necessary,' and 'contingent.' I also claimed that, if our uses of the aforementioned fundamental words were governed primarily by the logic of a picture abstracted into an account of seeing from the putatively unreflected "phenomena" of seeing, the conception of the world that we should have would differ importantly from the one we should have, if our uses were governed instead by the logic of a picture abstracted into an account of hearing.

These claims moved me to undertake a phenomenology of seeing and hearing, to devise pictures of seeing and hearing, respectively, that would isolate the peculiar genius of each of these, at least as these senses are depicted in the pictures. Having done this, I tentatively suggested that the concepts 'form,' 'order,' 'whole,' 'integrity,' 'reason,' 'motif,' 'meaning,' or 'gestalt'—indeed, that of 'logic' itself—are quite capable of being used subject to the "logic" of the audial picture, whether this be conceived in terms of the musical or of the lively speech-act model. It seems clear now that while 'cause'²⁰ presents special difficulties for the audial models, it presents an even more telling incoherence for the visual one. On the other hand the picture of vision that I developed, its logic being strictly observed, affords a comfortable place for 'form,' 'order,' 'whole,' 'integrity,' and 'gestalt,' but has only a *most* equivocal one for 'reason,' 'motif,' or 'meaning'—the picture of sight presenting us as it does with a mere slice of dead (visual) space.

Finally the suggestion that the picture of seeing is the "experiential" source of our sense of the contrast *necessary-contingent* has led me to explore the several meanings of these concepts and to consider the congeniality of each respectively with the visual and audial pictures. And here, so far, I have isolated a use of 'necessary' that characterized the eternal, static, finite, unavoidable, inevitable (because unchangeable), and universal relations that obtain among the sensuously simultaneous, co-present particulars depicted in the visual picture; a use of 'necessary' that characterized the "reposeful" and "finite"—even the comfortingly "inevitable"—relations among the temporally resolved particulars of the First Prelude of

Bach; a use of 'contingent' that is (merely) relative—in the terms of our strictly stipulated example, the eight-tone scale in C major; and, finally, a use of 'contingent' that by contrast is absolute, in some as yet unspecified sense.

Now let us consider the notion of *absolute* contingency. The first thing to be said perhaps is that there is one sense of absolute contingency—the sense, namely, of a pure, radically underivable, therefore motifless, hence meaningless happening—that is difficult to conceive except as a total abstraction. Existentially, a radical novelty or an “absolutely” random occurrence, *to be remarked as such*, must after all fall within the sense-giving and sense-reading matrix of my lively mindbody and, as such, *if remarked*, appears as a radical *other-than* of this matrix of meaning and intentionality. In other words it is “derived”: it is recognized and identified *as the other than*; it has a meaning—as *the absolutely other*. I do not wish to claim that absolute contingency as this radical *other-than* of my sense-giving, sense-reading, tonic mindbody is not really and radically an *other*. I mean rather to claim that its meaning *as* absolute contingency, *as* random occurrence, *as* radical novelty—even *as other-than*—only arises from within the background of and is parasitical upon the antecedently given and irreducible meaning and intentionality of my mindbody. Even the nausea of Jean-Paul Sartre's Antoine Roquentin in face of the absurd facticity and underivability of the world requires as its setting and premise the given mindbodily sense and meaning of which this absurdity is oppugantly the other: Antoine can assert the absurdity of the roots of the chestnut tree only by *tacitly* asserting the nonabsurdity of his own being. And if he makes yet a further move of abstraction and *explicitly* asserts his own absurdity, his existence can stand as absurd only as the oppugantly *other* of his nonabsurd assertion of his absurdity.

Subject to this qualification, it is then possible to go on to claim that, if we define aleatory music as analogous to a dice game in which at least one die has at least one “wild” side, it is a model for a “succession”²¹ of *absolutely* contingent events in the audial world.

We have then in the Bach Prelude a working model of a succession of *relatively* contingent notes that allow for a dynamism quite absent from our picture of seeing, while permitting alternative uses of 'necessary,' 'finite,' 'repose,' 'whole,' and the like, to those that could conceivably appear in the picture of sight. And this, we have seen, is because the notes are subject to the motif of the eight-tone scale, the key of C, and Bach's musical inspiration.

We now also have projected, even though recognizing that it cannot be coherently done, a model of a "succession" of *absolutely* contingent notes in aleatory music, defined as above and subject to the already specified qualifications, in which no sense of 'necessary relation' is apposite, in which every note is an absolute novelty and into which the concept of dynamism can be introduced only by a surreptitious obtrusion of relations among the notes where, we have already seen, none can strictly exist.

Before proceeding let us animadvert upon my claim, following Jonas's suggestion, that it is only in sight, with its sensuously simultaneous co-presence of particulars, that we have a sense of enduring objects, thereby giving rise "experientially" to the distinction between change and the relatively unchanging, hence becoming and being, existence and essence, time and eternity, infinity and the finite. I expanded Jonas's claim by saying that sight is also the "experiential" source of the contrast contingent-necessary, with however a caveat.²² My analysis of the contrasting pictures of seeing and hearing shows that in addition there is in fact a mitigating supplementary "experiential" source for the distinction between necessity and contingency in our "experience" of hearing as well, though it provides an importantly different model of what they respectively are. Most importantly, we have seen that both in terms of our musical model and in the analogous but importantly different speech-act model, occurrence in time of their particulars may be *at once* necessarily *and* contingently related: in the musical case of Bach's Prelude, taken by itself, necessarily and *relatively* contingently; in the case of the speech-act, taken in its uniqueness, necessarily and *absolutely* contingently.

VI

It is rather extraordinary to claim that the “events” in the world of what we hear in the reciprocal oral-aural speech situation may at once be governed by necessity and be *absolutely* contingent. The examination of our two musical cases—Bach and aleatory music—afforded no such conjunction. In the first, we can have necessity and *relative* contingency; in the second, there can be no necessity, and *absolute* contingency is just barely thinkable. Supporting such a claim then requires that we examine with some care what is unique to the reciprocal oral-aural situation and to a specific speech-act.

What of a sort cognate with the findings just summarized are we then to observe about the lively and actual speech-act? I have claimed above that the connectedness of the words in a speech-act, even though they may sound “melodic” because they are both sonant and temporally successive, are also “successive” in a different mode: namely, subject to the suasions of the motifs of syntax, grammar, and even of semantics, not to mention being subject to what the speaker wishes to say. The “place” in time of the constituent words of a speech-act is not determined by their sonant qualities alone but by their meaning as subject to the motifs of what native speakers of English *do*, what in practice they are *given to doing*. I shall assume that the concept of a spoken word that is inaudible in principle (as opposed to in fact) is an incoherence. The words in an actual lively speech-act are sounds, as are the played notes in a heard melody. I explicitly make this self-evident point in order that henceforth in this discussion it can be ignored. Otherwise there might be the temptation to see the analogies between the sounder of musical notes (a musical instrument) and the sounder of words (the human voice) without adequately remarking their disanalogies. For I wish to be able to say that in ways not wholly

disanalogous with the notes in aleatory music, as I have defined it, the words of an actual lively speech-act as spoken and owned by their speaker are absolutely novel; indeed, that this is our very paradigm of novelty whereby we escape the incoherences encountered in our effort to think of a wholly random event with the model of aleatory music. Even while the particulars of a speech-act *as sonic* may be, in contrast in this respect to those of aleatory music, subject to the motif of their own melodiousness; and even while *as audible verbal tokens* in the English language they are generally subject to those motifs of syntax, grammar, and semantics that appear in what native speakers are given to doing, again, in contrast in this respect to the particulars of aleatory music; every particular of an actual speech-act, though they be motivally connected in these two ways, is *absolutely* contingent, in that sense of contingent appropriate to an actual speech-act.¹ What we have here in the oral/aural world of speech-acts, then, is a *sonic* event that will be related to its predecessors and successors by the motifs of the natural melodiousness of human speech; a *verbal* event related to its predecessors and successors by the motifs of syntax, grammar, and semantics; and a *speech* event at the “center” of which is an actually existent speaker.

Now it is necessary for us to consider that which is irreducibly unique to the *act* of speaking, as opposed to observable “behavior” of speaking. What, we ask, is it to speak? Intuitively I feel that my speech-act must be at once motivational, that is, subject to a kind of “necessity,” to the suasion² of motifs, and yet absolutely contingent. It is difficult to see how this might be so, if we pose this opposition in conventional ways. But let us see if it might be, and if so how.

Obviously a speech event is subject to the biochemical, physical, physiological, and other causal principles in terms of which the relations among the particulars of the existing mindbody of the actual speaker, who is at the “center” of this event, could be analyzed. To mention only some: this event has a causally analyzable physical setting and a causally analyzable social setting (where ‘cause’ in both the sociologist’s and the psychologist’s sense may be applied); and it is a context susceptible of interpretation in terms of various forms of linguistic theory, as well as many other modes of approach and interpretation.

As the actually existent speaker at the center of this speech event, I am under the sway of the motifs of the natural melodiousness of the human voice in speech; of the motifs of the syntax, grammar, and semantics that appear in what I and my fellow speakers *do* and are, in speaking, *given to*

doing; of the motifs of my general intentional orientation from out of my mindbodily being toward the world; and of those of the particular intentions to say what on this occasion I want to say. My actually existent, speaking mindbody, though subject to the principles of causality, is always something that I, *as existing*, am engaged actively in taking up as my own—"from within" my actually existent *speaking* mindbody. The mindbody, though under the reign of motifs of melodious vocal sound, of syntax, grammar, and semantics, and of what I am intending to say, is something that I *as speaker* am engaged actively in taking up as my own. In *this* sense my actual mindbodily existence as *in this moment* a speaking speaker is contingent: contingent in the sense that my very *being at this moment*, though it has the character it has in virtue of the motifs that reign over it, *exists* because of my act of taking myself up and apart from which act I would not exist as what and who I am. To state the matter without even the most preliminary philosophical refinement (though the statement may on its face seem either gratuitous or false): as a tonic mindbodily being in the world, a necessary condition of my existing *at all* is that I not merely "consent" to exist, but that I positively "intend" to do so. This contrast between consenting and intending is one that we mindbodily encounter in ourselves in the midst of our most ordinary activities many times a day.

But the heart of actual speech is the *radically* contingent, *absolutely* novel, and underivable act of owning and owning up to these my very particular words—and *this is so no matter how often it is done*. Unowned "words" are not in fact words; absconded from, they have become mere sounds—as when we say of another's empty and unowned "speech": "words, words, words," when what we mean is of course "sounds, sounds, sounds." They are *mere* sounds, no part of language jointly owned among men; henceforth they are mere noise, surdities bereft of any human voice. Authentic speech is the act of owning my own words *before you*. Indeed, speaking authentically, that is, owning my own words *before you* is precisely the means of my *being a person*; to be able to be a person is for me at bottom nothing other than to *be able before you* to own my words. This is why we so readily fail of being persons according to this picture: to own, to own up to, to be as good as our words, even when we *fully* intend to, even when we *suppose* ourselves fully to, even when we *vow* to, happens only by grace. Only God is faithful and is always, no matter how inscrutably so, as good as His word: always *Yahweh*—"I will be that I will be." *This* is our paradigm of personhood, against the measure of which, apart from grace,

we always fall short. Such are the logical dictates of these metaphors.

It was Polanyi's unexpected uses of such concepts as 'logical anteriority,' 'logical derivation,' and 'implication,' you will remember, that led us to an inquiry into the picture of seeing and the picture of hearing. I suggested that the Western imagination has superordinated the former over the latter; and that this had not only predisposed us to use in one way rather than in others certain fundamental concepts by which we comprehend the general connectedness of things, concepts such as 'order,' 'form,' 'whole,' 'cause,' 'motif'; but that it had equally shaped the paradigm logical matrix in terms of which we have regulated our use of 'logic' itself.

It was this claim that led me in turn to examine the notions of necessity and contingency with particular reference to the pictures of seeing and of hearing.

We have now isolated two qualified senses of *absolute* contingency, both elucidated by means primarily of pictures drawn from our experience of hearing. The one case is the absolute contingency of any given note following another in aleatory music. It is not without significance that I depicted the nature of aleatory music in its most radical conceivable form, namely, in a form in which the sounding of any given note in any "succession" of notes would be a random occurrence; and that I underscored my point by the use of a nonaudial model, namely, the throwing of a pair of gaming dice at least one side of which would be designated "wild."³

The second form of absolute contingency was developed on the model of the audial world of lively speech-acts. Obviously the most striking difference between this case and the one with aleatory music is also the crucial one: my speech-act in order strictly to be a *speech-act* must occur *before another*, who hears, takes up, and covenants with my words. This joint act of owning our mutual words is the act by which, for all of its radical underivability and contingency, we become persons. It is on this basis that I can satisfy an intuitively felt demand that my speech-act must be at once motival, that is, subject to the suasion of motifs, hence "necessary," and yet at the same time absolutely contingent. And here the absolute contingency of my spoken and owned words is at the same time entirely comports with their being subject to the sonant and syntactical motifs of speech; whereas the contingency of a "chance" note in aleatory music strictly cannot be subject to any motifs whatsoever without ceasing to be random.

You may recall that by attending to the inherent logic of our picture of hearing and the audial world, we isolated a sense of *relative* contingency.

We observed that in the temporal succession of played and heard notes there was time, there was dynamism, and there was relative contingency in our mindbodily feeling that each note hung in the air awaiting the *uncertain* (in that sense of the contrast *certain-uncertain* derivable from the visual picture) sounding of the next note in time as the melody is resolved. All of these elements were missing from our picture of vision.

For all that there is the dynamism and relative contingency in the relations among the notes in the temporal succession of a heard melody, however, there is also a profound sense of the motival and intentional *connectedness* among them. In short, we discovered that particulars in time may be contingently and yet *not causally* related: that they may have a motival connection, a logic that is quite at home in a temporal setting, and that at the same time there can be a *necessity* that is neither strictly atemporal, as with that developed around the visual picture, nor yet strictly incommensurate with (relative) *contingency*, as with the audial picture fashioned from the Bach Prelude.

These on their face outlandish claims become possible because we have remarked that there is no difficulty in applying the concepts of order, form, integrity, motif, meaning, and the like to the First Prelude. Even stasis, in a sense entirely appropriate to music but quite at variance with its use in the visual case, is applicable to it. And we observed that we could say of the sense of contingency appearing in this music that it was only *relative*; that it embodies a profound feeling of repose; that the melody's resolution, once accomplished, brings with it a comforting sense of inevitability; and finally that all of this is the case because it is subject to the regulation of the motifs of the eight-tone scale in C major.

We do not need, before applying these findings to the decoding of Polanyi's uses of 'logical anteriority,' 'logical derivation,' 'implication,' and their cognates, to raise and answer the vexing question as to whether a logical relation *in time*, in, that is, what traditionally philosophy has called the "contingent world," has to be subject to a finite set of possibilities capable of being unfolded in a finite length of time. This is a very large question that will require us to revisit our analysis of the speech-act in which I held that it can be at once absolutely contingent and yet subject to the suasion of motifs. This will in turn lead us to contrast the conceptions of reality generally found, in our tradition, in classical antiquity and that to be found in biblical modes of thought. For the question as to whether a logical relation *in time*, in the above sense, is subject to a finite set of possibilities is, as I have claimed, really the most general question as to the nature of

things. For the present it is only necessary that we have legitimized a way of claiming that the relation between one moment and the next in the succession of moments in the course of which I am puzzling, groping to formulate a question, seeking and coming to know, making an acknowledging affirmation of what I have come to know and upholding my knowledge—whether this succession has the duration of ten minutes or of a lifetime—is a *logical* relation. To be able to claim this it is necessary for us to be able legitimately to consider, in appropriate circumstances, the relation between one moment and the next in the intentional unfolding of our mindbodies in their world as not merely temporal or temporal and causal, but as *logical*.

In the musical example of the First Prelude we are given a way irreducibly to conceive of a *logical* relatedness *in time*. For in it (bracketing out for now the large question as to whether such a relation in time is subject to a finite set of possibilities, namely, the eight-tone scale in the case of our musical example) we found that particulars in time may have a noncausal *motivational* relation, may be informed by a logic that is entirely at home in a temporal setting, even that there can be a *necessity* that is neither strictly atemporal (as with the visual case) nor yet strictly incommensurate with (relative) contingency.

Let us now return to the text of *Personal Knowledge*. Polanyi says: "Beliefs and valuations [I have proposed that we here read: believings and valuings or evaluings] have accordingly functioned as joint premisses in the pursuit of scientific enquiries. . . . But 'premiss' is a logical category: it refers to an affirmation which is logically anterior to that of which it is the premiss" (p. 161).

In reading "beliefs and valuations" as "believings and evaluings" (including, in the spirit of Polanyi, believings and evaluings not explicitly known or even knowable), I am following my own earlier lead of picturing the "epistemological subject" as actively embrangled in his own activity of inquiry. So this inquirer may be actively *relying in one moment* of time upon a set of believings and evaluings, of which he may be only somewhat aware, to bear him forward into the next moment with believings and evaluings that (logically) follow from the first; but of which he could not in the one moment be explicitly *aware* as following in the next, that is, in the same sense of 'aware' as is apposite to his earlier believings and evaluings. And though, as we earlier remarked, Polanyi is clearly ill at ease with the appearance in this passage of the words 'premise' and 'logically anterior' ("But 'premiss' is a *logical category*: it refers to an affirmation which is

logically anterior to that of which it is the premiss"), if we construe the matter as I have, then any set of believings and evaluings in *one moment of the temporal succession* within which I am engaged in inquiry, whether those be *explicit* believings and evaluings or *tacit* believings and evaluings (unknown and perhaps even unknowable to me), may be the *logical premisses* from which the "discoveries" of the *next moment* arise and are therefore *logically anterior* to the later believings and evaluings. Such a construction also removes the incoherence of having *actual*, "contingent" (in the use familiar in the philosophic tradition) "believings," "evaluings," and "affirmings" standing in relations of *logical* posteriority to other *actual*, "contingent" "believings" and "evaluings."

It is then not too much to suggest that the model that governs Polanyi's use of 'logically anterior,' 'logically derivative,' 'premise,' and their cognates is a musical one: as in the Bach Prelude the temporal sequence of heard notes C, E, G, C/E, G, C is one in which the logic of melody itself demands that the second C pretends for me the E, G, c that follow it and retrotends for me the C, E, G that precede it. If we did not hear this dynamic pretension and retrotension quite simply, there could be no such thing as music.

Again, Polanyi says: "*The logical premisses of factuality are not known to us or believed by us before we start establishing facts, but are recognized on the contrary by reflecting on the way we establish facts*" (*P.K.*, p. 162; emphasis in original except that on "The logical premisses").

Here it is clear that Polanyi means that "the logical premisses of factuality," though "not [explicitly] known to us or [explicitly] believed by us" before our inquiry into facts has begun, are *tacitly* known to us and *tacitly* believed by us before our inquiry and also before our later explicit recognition, by reflection upon our way of establishing facts, of these hitherto tacitly held premisses (as the very logical ground of our inquiry); and that the relation between the earlier tacit "believings" and the later explicit "believings" is a *logical relation*. His uses of these "logical" terms to characterize the to and fro movement of the mindbody of the inquirer thoroughly embeds logic in the description of the temporal flux of the "contingent" world in the midst of which the mindbodily being as inquirer is thoroughly entrammelled. If we are considering the mindbody's integrity as "psychosomatic" existent, then we will variously apply diverse principles of causality. If however we are to comprehend the form of its integrity *as actively engaged in inquiry in time*, we shall have to recognize that this is governed by logic: logic in our now increasingly flexible sense.

There is here then a sense of a dynamic *pretension* and *retrotension*. At any given moment, the (only tacitly known) logical premises of factuality already pretend for me the yet to be reflected *explicit* premises, as C, as I hear it, pretends for me the as yet “unheard” E, G, C that follow it; the explicitly reflected premises, now at a later moment, still retrotend for me the once only tacitly known logical premises, as C retrotends for me the no longer “heard” C, E, G that preceded it. As certainly as we would not have music did we not mindbodily dwell in this dynamic pretension and retrotension, so certainly could we not “know” that the tacit is the *logical ground* of the explicit and that the explicit is the *logical derivative* of the tacit, if we did not. As little could we “know” that one moment of our mindbodily existence protends its later ones; or that its later ones derive from the earlier. This logic of the tonic mindbody existing in time is the *form* of what are called our tactile, proprioceptive, kinesthetic, and haptic senses. It is also the only ground we have or need—it being the best that could be imagined—for the accreditation of the principles of induction.⁴ The certitude we have that the world has an integrity such that its earlier moments pretend its later ones and that its later ones retrotend its earlier is the complement of our archaic sense of the gestalt of our own integral mindbody. Only a bewitchment by the model of logical connection found in strict, rigid deductive systems, misapplied to the case of induction, could ever have led us to have “some doubts about induction”—as Bertrand Russell did in a famous paper.

It was this explicit line of exegesis given immediately above that in its tacit form underlay an earlier argument. There I said that it was legitimate and even sometimes logically demanded that we say of the structure of a physical skill that some of its particulars stand to others of its particulars in a way importantly analogous to that in which assertions stand to assumptions, when, that is, the latter are taken to be the ground of the former. After entertaining some legitimate skepticism as to whether we should wish to say, “muscles make assumptions,” I went on to claim that as certainly as we think of component particulars of a motor skill as hanging together and jointly *meaning* that skill—answering by default no questions as to the propriety in other conceptual matrices of using causal concepts—so certainly do we regard them, in this conceptual context, as standing in logical relations with one another and with the skill as a whole, taken as their comprehension. As this comprehension, they support, indeed, are, in this conceptual landscape, the logical ground of the action that depends upon this comprehension. They

can in short be the assumption upon which the act is based.

And when we read once more: "Our acceptance of what is logically anterior is based on our prior acceptance of what is logically derivative, as being implied in our acceptance of the latter" (*P.K.*, p. 191), we shall appreciate the exegetical value of the musical model of how particulars appearing in a succession in time may be understood as at once standing in a relation with one another that is not reducible to a mere causal relation, yet nevertheless being both (relatively) contingent and necessary (in a mode appropriate to a temporal integration). In short, these particulars in a succession may be understood as being in a *logical* relation, in our now extended sense. For the temporally attenuated tonic mindbody any of its given believings and evaluings *pretend* themselves as explicable and *retrotend* themselves as hitherto tacit. All this is said in the service of making the claim that logic, the *form* of the "making sense" of things for us, is more deeply and ubiquitously, though inexplicitly, embedded in our ordinary thinking and doing—waiting to be reflected as embodied there—than we notice when we reflect upon this fact in the light of models ("a picture held us captive"—L. Wittgenstein) formed by critical philosophy, beginning with Descartes, which, relying upon the picture abstracted from seeing as a model of our situation in the world as knowers, increasingly took mathematics and formal logic, to the exclusion of what would have been mitigating complements, to be the paradigms of the "hanging togetherness" of things and the "making sense" of things.

As I was about to apply to the exegesis of Polanyi's uses of logical concepts my analyses of seeing and hearing and the musical model of logical relation derived therefrom, I rhetorically raised a question which I then tabled for future consideration. The question was this: is a *logical relation* in *time*, conceived as a formal property of the relations among things in what we have called the "contingent world," of such a sort as to require us to claim that *reality itself* is subject to a finite set of possibilities, capable of being unfolded in a finite length of time? No such question of course could arise from reflection upon our picture of seeing and sight alone, for, while this presents us with a notion of the finite, it is such a conception as could arise only within a slice of dead (visual) space. In the case of Bach's Prelude we derived a clear sense of finitude from the genuinely dynamic temporal gestalt of a musical resolution, a resolution which when accomplished brings a fine sense of repose and inevitability. This audial model allowed us to see that the particulars in a temporal succession stand in relations with one another both of (relative) contingency and of

necessity. And it was the reign over these particulars of the motifs of the eight-tone scale in C major, that, as described, had to be admitted to afford only a finite number of possible combinations and permutations. Being in time, the relations among the notes of the Prelude were seen to be contingent; however, being subject to the motif of the eight-tone scale made their relations only *relatively* contingent (in contrast to the case of the “notes” in aleatory music and, in a different way, the case of the words in an actual speech-act); yet the same rule that makes their relations *only relatively* contingent also makes them *necessary*, in that sense of ‘necessary’ governed by the logic of our picture of hearing.

Clearly the very sense of such expressions as ‘contingent world,’ ‘true contingently,’ ‘contingent knowledge,’ in contrast to ‘true necessarily,’ ‘necessary knowledge,’ and ‘eternal and necessary cosmos,’ and the like, central to debates within the philosophic tradition, come under very severe pressure from the supposition that there may be relative and (with appropriate qualifications) absolute senses of contingency; “necessary” relations in the “contingent world” and, even, that relations among occurrences in the “contingent world” are at once both (relatively) contingent and necessary. If this is the case, then a dispute of some magnitude seems at issue, further supporting my claim that the question provoked by the musical model as to whether reality *itself* is subject to a finite set of possibilities, capable of being unfolded in a finite length of time, is the most general question we can conceive as to the nature of things. The ground upon which the traditional debates have taken place seems suddenly to have undergone a seismic shift.

In tabling this question I said that, when we returned to consider it, I should have to revisit the analysis of the actual speech-act of which we must say that it is at once both *absolutely* contingent yet subject to the suasion of motifs; and that this would in turn lead me to contrast the conception of reality of classical antiquity with that propagated in biblical modes of thought.

I am fully aware of the presumption I exhibit and of the risks I run in proposing to develop this line of argument. The dilemma seems to be that those possessed of the linguistic skills and the historical perspectives that might enable them to do this are likely to be overwhelmed by a sense of the complexity of things with which their learning burdens them and therefore are intimidated into silence on such large issues. Those like myself, on the other hand, who enjoy acquittal from this inhibition and therefore are willing to address the larger questions, suffer from another, namely, the

sense of the great difficulty of discussing them with a sufficient degree of concreteness to command plausible authority.

However, I shall overcome my scruples. For I shall come at these matters as a philosopher and as a phenomenologist of my own culture. The rationale for following this procedure goes deep into substantive methodological choices. If I, from one point of view, too often bypass the scholarly philological and historical materials which from that point of view have a bearing upon this inquiry, it is not merely by reason of reaching the limits of my competence. From the perspective adopted here it is the Pre-Socratics, the Plato, the Aristotle *of our intellectual tradition*; the Exodus, Genesis, Deuteronomy, Isaiah, and Epistle to the Romans *operative in the contemporary text of our own imaginations* that I aspire to exegete.

Therefore my "text" will not primarily be the literature of the philosophic Greeks and the Hebrews approached directly, but rather the models that I find in my own imagination without an explication of which I can make no sense of the thought of the Western tradition; that may be analytically educed from the repertoire of philosophical puzzles found in that tradition; whose "logic" may then be displayed; and, finally, whose dependence primarily upon one or the other of these two modes of thought can be suggested.

As for Polanyi, if he after all carries out a number of unwitting conceptual innovations in his thought; in particular, if he uses certain logical concepts in ways that seem skewed in relation to the tradition, we shall have to assume that there was a deep wit at work in his imagination, shaping itself around models, metaphors, analogies, pictures shared by us all, but which he, in contrast to those of us immured in the tradition, allowed to have their way with his mindbody to issue in the articulations of the thought of *Personal Knowledge*. It is not then necessary for us to suppose that he enjoyed wide and explicit literacy in Greek and Hebrew documents, which he did not, in order for us to invoke these contrasts as a heuristic device.

VII

For both the Greeks and the Hebrews as we know them from the philosophical writings of Plato and his successors and from the Old Testament, but even more, as we know them in what our imaginations have appropriated from these—the primordial metaphor for reality was the *word*: for the Greeks, *logos*; for the Hebrews, *dabhar*. If this is so, how did it come about that, appearing to begin on common ground, the Greek philosophical view of reality should, on the one hand, seem so thoroughly implicated with the logic of pictures abstracted from the actual phenomena of seeing; while, on the other, the Hebrew view of reality should seem so consistently to imply its affiliation with pictures abstracted from the actual phenomena of the lively oral-aural reciprocity?

This sounds very like a historical or genetic question; and there is a sense in which its force must be this in part. However, I shall examine it primarily in terms of the logic of our reflected pictures of seeing and of hearing, subordinating to this such modest philological and historical conjectures as I am capable of entertaining. The word is, after all, both spoken and heard, written and read. If we were to superordinate the spoken and heard word over the written and read, what alterations would occur in the logic of the primordial metaphor for reality?

If we are to elucidate the apparent divergence of direction of the Greeks and Hebrews from their common ground in the word toward what became their differing primordial metaphors for reality; and if we are to appreciate fully the distinctive logical force of each; we shall have to consider first the nature of the “physical” “object” by means of which verbal meaning appears in the world, whether it be “spoken” and heard or “written” and seen.¹

We have already observed through the articulation of a picture of seeing

that we are led by it into conceiving the world of the visible as static, eternal, necessary (in the sense appropriate to the *visual* picture) filled with “eternally” enduring objects in a time that is only that of their endurance “throughout” the dead slice of (visual) space that they occupy. Our picture of hearing, modelled upon the Bach Prelude, presented the audial world as dynamic, filled with temporally unfolding objects the particulars of which are not sensuously and simultaneously co-present, thus allowing for a relative contingency and, at the same time, exhibiting a necessity (in the sense appropriate to this *audial* picture). Our picture of hearing, revolving about the model of aleatory music, gave us an audial world different from that presented by the Prelude in being filled with *absolute* contingencies (subject to the stated qualifications), hence admitting necessity only in the most equivocal sense: the sense, namely, implied in the tonic mindbody’s exigent demand for an integration cognate with its own existential integrity among the particulars randomly addressed to its hearing. Finally we saw in the picture of hearing affiliated with the speech-act that in it there is genuine temporal succession and dynamism; that as naturally melodic, there is relative contingency; and that as a speech-act, there is absolute contingency, which even so is subject to the suasion of motifs.

Except as implied in the very words used to characterize the seen and heard worlds—words like ‘static,’ ‘dynamic,’ ‘eternal,’ ‘temporal,’ ‘contingent,’ ‘necessary’—little has been said about how I am inclined reflectively to grasp the being of my tonic mindbody and its relation to its world when my imagination is disposed in one direction rather than in some other by one or another of the pictures. It is one of the theses of these meditations of course that my way of dwelling in my world reflectively is a function of the reflective instruments I am given to using, a function of the pictures I have come to favor. And this, I have claimed, means that as I and my world are reflected into being in me, I simultaneously both *have* and am *in the midst* of a picture. It is barely conceivable that I might abandon reflection altogether. It is certainly conceivable that I might abandon one set of reflective instruments for another. Giotto and his successors with linear perspective certainly expressed, further educed, and endorsed in Western man a new and decisive element in his way of beholding himself in the world: Western man came, in fact, to *behold* himself, to gaze at, to look upon himself (from afar). Merleau-Ponty has said, you will recall, “Perspective does not give me a human view of the world. It gives me *knowledge that can be obtained from a human viewpoint by a god who does not get caught in finitude.*”² One cannot have before one the picture of ourselves

in the world in the linear perspective of Giotto, Masaccio, Michelangelo, and Leonardo without coming to be in the midst of that picture, disposing us toward a certain kind of knowledge of where and how we are. As little can we have "before"³ us the contrapuntal and polyphonic picture of ourselves in the world given in an orchestral transcription of Bach's *The Art of the Fugue* without coming to be in the midst of it. Nor can we have "before" us the picture of ourselves in the world given in the layout of Washington, D.C.—very different indeed from that of Florence, Italy, or Oxford, England—without coming to be *in the midst* of it. These kinds of relations between the picture as we *have* it and the picture as we are *in the midst* of it are herewith nicely suggested: "Before Galileo, it was natural to imagine an architecture which celebrated the properties of the human body, and easier to believe that this body was possessed by a sacred authority. But, if instead, the human body was thought to obey mechanical laws, should not the architecture which served it also obey mechanical laws?"⁴

But I have said little explicitly as to how I am likely to be disposed to appreciate my own mindbodily being in my world, if I tend to do so primarily in terms of pictures of seeing or, alternatively, primarily in terms of pictures of hearing.

In his analysis of seeing, Jonas characterizes the uniqueness of sight in terms of three powers that it has: to present a manifold simultaneously; to neutralize the causality of sense-affection; and to set things at a distance both spatially and mentally. The corresponding modality of my *merely existent* mindbodily being insofar as it is seeing, according to Jonas's account, is for it to be in the present (that is, in a kind of eternity), to enjoy a mitigation of the immediate claims of its sense-affections, and in some measure to oppose itself to its world. The corresponding modality of my *reflecting* mindbody, insofar as its imagination is suffused with and superordinates this picture as an instrument of reflection, is for it to imagine itself disembrangled from temporality, untrammelled by its senses and enjoying the status of a spectator at a distance, beholding the world as a spectacle.

Now obviously were the pictures superordinately infusing my imagination of the audial sort, these cases would be quite different. Whether thinking primarily in terms of the musical model or the model of the speech-act, dwelling in these pictures and relying upon them as instruments for reflecting into being the mode of my mindbody's existence would depict me as sense-affectionally implicated with and enmeshed in the fabric of the world.

At this juncture it is useful to invoke a distinction, to be used rather

differently here, made by Erwin Straus: that, namely, between the *gnostic* and *pathic* moments of experience.⁵ He says: "Of experience as a whole, it has been always the *gnostic* and never the *pathic* moment that has been remarked and considered.⁶ . . . Vision, hearing, and the other senses do not just provide sensing impressions, do not just enable color and sound to appear before us; at the same time that we perceive objects, we also sense the colors and tones, *i.e.*, *they take hold of us and influence us in a lawfully determinate way.*"⁷

Straus's thesis is that there are different forms of space; that the space in which we are goal-directed—in walking, marching, acting—tends to be articulated, whereas that of our "presentifying movement," that, say, in which we dance and which is constituted by music, tends by contrast to be homogenized; and finally that in the former the *gnostic* moment of experience is dominant, in the latter the *pathic*. He illustrates the contrast as follows, using the acts of touching and looking: "In the shift from touching to looking, there is a change in the relative dominance of pathic and gnostic moments in experience. In touching, the pathic is dominant; in looking, the gnostic dominates. 'Looking at' brings every object into the domain of the objective and general."⁸ In the terms that have emerged in our discussion, this is to say that seeing alienates us by abstraction from the immediacies of the sense-affections of our existing tonic mindbodies, as do *pictures* of seeing that have been given inhabitancy in our imaginations as one of our reflective instruments; whereas touch (our case is, of course, that of hearing) preserves our patriation in our mindbodies, as do also *pictures* of hearing.

My purpose in drawing upon the gnostic-pathic distinction is somewhat different from that of Straus. I have wondered what the nature of the physical "object" is by means of which verbal meaning appears in the world, whether "spoken" and heard or "written" and seen. And this I asked in order that we might interpret the divergence between Greeks and Hebrews, both of whom take the *word* to be the primordial metaphor for reality.

At this point I begin to labor under a grave disability. In order to advance the argument, I must evoke between myself and you the actuality of the lively oral-aural reciprocity in order to contrast it phenomenologically with the presence of the word as written and read. Yet I have to perform this evocation *in the medium of the printed word*. A fit subject for such a phenomenology would be an actual—as opposed to a written-down—dialogue between you and me. This in part is the dilemma stated by

Plato in *The Seventh Letter*. Written argument is difficult to appropriate profoundly and it is easy shallowly to parrot, because it has been alienated even if only ever so slightly from the sense-affections of the mindbody of its author, hence of its reader. We all know it is easier successfully to lie in print to an anonymous reader than to an existent person, face to face. My written-down words cannot “speak,” they cannot “look you in the eye” in the way that I can when I *speak* my words to you.

In actually speaking a word, though hardly ever explicitly aware of it, I involve the “muscles,” “tissues,” and “ligaments” and rely upon the “skeleton”⁹ (I cannot, for example, speak when I am doubled over) in the activity, unreflectingly “known” to me, of sounding a word. My mindbody resonates to this activity and to the sound. I can listen with my ears, if I make a point of it. But the sound that I make and hear is heard by my mindbody: by the muscles of my chest, by my diaphragm, my throat, my neck, my glottis, tongue, lips, and palate. And the sound is neither “inside” nor “outside,” but rather in the “middle,” or at the chiasma where my tonic mindbody and its world encounter one another. In my mindbodily relation to the physical entity that, as I speak, I bring forth and that may be the medium in which verbal meaning enters the world, the *pathic* is dominant over the *gnostic*.

By contrast my own written-down words so passionately groped after in the event, their emergent closure sounding in me then a chord of aesthetic celebration as they came, seem after the fact alien, other: words on a page, no longer mine, their peculiar weight for me—even perhaps their very meaning—becoming attenuated. As Straus has said: “‘Looking at’ brings every object into the domain of the objective and general.” Here the *gnostic* is dominant over the *pathic*.

If this is so for me, moving from the activity of writing my own words to the detached reading of them, how much more is this the case for you. These are words upon a page, not addressed to you but “to whom, if anyone, it may concern”—addressed in short to no one. And this can be the case, even if the words are in a letter saluting you, signed by me, and bearing your street address. Here by contrast the *gnostic* is dominant over the *pathic*.

The word as *audial entity*, as a mere worldly object that we hear, like a musical note or the crack of breaking ice, is an entity to which we mindbodily stand more *pathic*, more richly *pathic*, than the word as *visual entity*, as a mere palpable object that we see. There is no gainsaying the advantages that accrue with literacy; but let us

not suppress the knowledge of the losses we sustain.

The malaise that I suffered and upon which I reported as the result of the striking contrast for me between the yellow legal pages of the first, hand-written version of these meditations and their later typed form is worth recalling in the present context. Above I said that I am bound to myself and to the world in the ligatures of language in such a way that I *read* as if I were listening and *write* as if I were speaking. I then went on to say that this means that my relation to the words, gathering momentum in order to appear on the yellow page from the tip of my ballpoint pen, are oral-aural-tactile in a way and to a degree that would not be so, were I to write primarily to my eye. The manuscript version still retains some of the pathic elements eliminated in the first typescript, where the oral-aural reciprocity has receded. The concrete idiosyncrasies of my "hand" on the written-upon page no longer allude to an actual, existential writer-down of words, evoking your "aural" response.¹⁰ Now the words are *visual* entities: uniform, standing in regularized spatial relations with one another, objective, general. Reading is much more a "looking at" than a "listening to." Relative dominance has shifted from the pathic to the gnostic. As Chaytor has said: "The history of the progress from script to print is a history of the gradual substitution of visual for auditory methods of communicating and receiving ideas."¹¹ To this it may be added from Goody that "writing establishes a different kind of relationship between the word and its referent, a relationship that is more general and more abstract, and less closely connected with the particularities of person, place and time, than obtains in oral communication."¹² The gnostic begins to dominate the pathic.

For the moment however what is important in our investigation of divergent views of the word as a primordial metaphor for reality is the fact, as shown by this phenomenological inquiry, that the way in which we stand to the *heard* word is profoundly different from the way we stand to the *read*; and that, if the word as the metaphor for reality is governed primarily by the logic of our picture of hearing rather than by that of our picture of seeing, the conception of reality itself will reflect that difference.

If these suggestions are, on their face, tentatively plausible, it is well to remember that, insofar as our intellectual tradition is jointly a product of, inter alia, these two different and (we may yet discover) logically dissonant and irreconcilable metaphors, we are the legatees of a profound conceptual incoherency that is at least two millennia old, and that will appear again and again in the philosophical puzzles of the tradition.

It is striking that students of the contrasts between preliterate and liter-

ate societies arrive at conclusions consonant with my phenomenological inquiries and those of Straus, Jonas, and Ihde.¹³ Goody goes so far as to say that "the overwhelming debt of the whole of contemporary civilization to classical Greece must be regarded as in some measure the result, not so much of the Greek genius, as of the intrinsic differences between non-literate (or proto-literate) and literate societies—the latter being mainly represented by those societies using the Greek alphabet and its derivatives."¹⁴

Let us keep in mind the consequences of the transition from my yellow legal manuscript page to the typescript whereby, as there is a shift in relative dominance from pathic to gnostic, words in the latter become visual entities in uniform, regularized spatial relations—static and atemporal, when compared to the dynamism and the sense still patent upon the pages of the manuscript of their having been unfolded in the temporal succession of the existential activity of my hand, writing them down. Let us also remember our depiction of seeing whence, having co-present before the eye, sensuously and simultaneously, all of the particulars of the visual field, we derive a use of 'necessary' that logically requires it to mean relations that are eternal, static, finite, unavoidable, and universal; and this because the relations among the particulars in the picture are presented as in a dead slice of (visual) space. The "time" of the co-endurance of these particulars is a present without real temporal thickness; it is, in short, "eternity."

We are now in the best place to make the most of Goody's asseveration: "It was only in the days of the first widespread alphabetic culture that the idea of 'logic'—of an *immutable and impersonal mode of discourse*—appears to have arisen."¹⁵ To which we can add: "In oral cultures, words—and especially words like 'God,' 'Justice,' 'Soul,' 'Good'—may hardly be conceived as separate entities, divorced from both the rest of the sentence and its social context. But once *given the physical reality of writing, they take on a life of their own*; and much Greek thought was concerned with attempting to explain their meanings satisfactorily, *and to relate these meanings to some ultimate principle of natural order in the universe, to the logos*."¹⁶

A brief gloss upon Goody and Watt's words is desirable here, for it is not without significance that for them the appearance of the word "as a physical reality" is the same as its appearance as *written*, hence *visible*. I am on the contrary claiming, you will recall, that the *sonic* word is no less a physical entity albeit a very different kind of one. There is a sense in which a printed word exists in a dead slice of (visual) space and hence seems more palpable; whereas a sonic word exists dynamically in time as well. A

fugitive entity (a word on my tongue, on my breath, in your ear) is less palpable, less an entity, less physical, *only if the uses of 'entity' and of 'physical' are governed by, say, the paradigm of the static printed word*, if, in short, 'entity' and 'physical' are governed in their use by the picture of seeing. The choice of language here is a striking example of the superordination in imagination of the visual picture, whereby 'physical' comes to be used in *this* rather than in other possible ways. Words "take on a life of their own" in becoming *physical*, in the sense of "primarily visual" as opposed to "primarily audial," because their being is estranged from the sense-affections of actual speakers and actual hearers in the oral-aural reciprocity. And while this transition is undoubtedly the one by which we achieve what we prize as our objectivity, its impact upon the economy of our sensorium, when hypertrophied, should not be ignored. Words "take on a life of their own," given the momentum of the shift from pathic to gnostic, because we *bestow* that "life of their own" upon them. If we estrange our acts of bestowal from their life and meaning and, if we devise a theory of meaning in which this fact is systematically forgotten, then once for all we will consolidate and secure our amnesia. This is why Wittgenstein drives us away from the linguistic essentialism preserved in this picture and in his own *Tractatus* back to the oral-aural reciprocity of actual speech. "Don't say: 'There *must* be something common [among things called games], or they would not be called "games"—but *look and see*, whether there is anything common to all . . . don't think, but look!"¹⁷ Go back and observe how in fact we actually speak when speaking and hearing as opposed to writing and reading. Again: "The ostensive definition explains the use—the meaning—of the word when the overall role of the word in language is clear."¹⁸ And he asks, in the face of our abdication from the interpersonal oral-aural reciprocity, and in the face, too, of our captivity to a *visual picture* of how words might stand in relations of meaning to one another, thereby to be either true or false: "A proposition, a thought, what makes it true—even when that thing is not there at all! Whence this determining of what is not yet there? This despotic demand? ('The hardness of the logical must.')"¹⁹ And finally: "We are . . . surprised, not at anyone's knowing the future, but at his being able to prophesy at all (right or wrong)"—since this, in terms of our logically essentialistic, that is, literate as opposed to nonliterate, i.e., visual as against oral-aural picture, seems to require that to have a meaning the words I now speak either conform or fail to conform to a state of affairs linguistically expressed in an already existing "eternal" text, "as if the mere prophecy, no matter whether

true or false, foreshadowed the future; whereas it knows nothing of the future and cannot know less than nothing.”²⁰

It is for this reason, as well, that Polanyi wishes to recover “personal knowledge,” to reinstate in the picture we at once *have* and are *in the midst of* a place for our responsibility for coming to know and for making acknowledging affirmations. For this reason he asserts that “into every act of knowing there enters a passionate contribution of the person knowing” (*PK.*, p. viii)—even into the routine act of reading a familiar text; and that in his own account of knowing he makes this, as our tradition would have it, trivial truth fundamental to his *account* of knowing.

When therefore we encounter Oswald Spengler saying: “Writing . . . implies a complete change in the relations of man’s waking consciousness, in that it *liberates it from the tyranny of the present*; . . . the activity of writing and reading is infinitely more abstract than that of speaking and hearing,”²¹ we will have no difficulty in knowing how to understand “the tyranny of the present.” This present is *not* the eternal present during which the simultaneously co-present particulars of the visual picture co-endure. *This* present from which literacy delivers us is in fact the endless passing into being and passing out of being of the moments of dynamic time that form the inescapable context of the oral-aural reciprocity.

The advent of literacy, by liberating us from the tyranny of the present, creates whole new orders of “objectivity” at the same time that it elevates the gnostic over the pathic and distances us from our sense-affections.

For example, on the distinction between myth and history, Goody and Watt observe:

Non-literate peoples, of course, often make a distinction between the lighter folk-tale, the graver myth, and the quasi-historical legend. But not so insistently, and for an obvious reason. As long as the legendary and doctrinal aspects of the cultural tradition are mediated orally, they are kept in relative harmony with each other. . . . But once the poems of Homer and Hesiod, which contained much of the earlier history, religion and cosmology of the Greeks, had been written down, succeeding generations were faced with old distinctions in sharply aggravated form: how far was the information about their gods and heroes literally true? How could its patent inconsistencies be explained? And how could the beliefs and attitudes implied be brought into line with those of the present?²²

Writers began to replace myth with a gestalt of meaning that they took to be more consistent “with their sense of the *logos* . . . the common and *all encompassing truth*.”²³ Skepticism, too, is fully possible only among literate people, for only among them is it possible for consciousness to mobilize its power to begin to conceive of tradition as a totality of implicit beliefs whose stability is protected, as Polanyi has observed, by reason of its circularity, epicyclicity, and the operation of what he calls the principle of suppressed nucleation. Only when a system of implicit beliefs is thought to have become explicit and is set out, as it were, in a very long, printed text, is it possible to imagine, as the Enlightenment did, that we can grasp the system as totality, thus to subject both its internal coherence and its premises—so it was supposed—to criticism.²⁴ “While scepticism may be present in [nonliterate] societies, it takes a personal, non-cumulative form; it does not lead to a deliberate rejection and reinterpretation of social dogma so much as to a semi-automatic readjustment of belief.”²⁵ To this Goody and Watt add, in a note: “So writers on the indigenous political systems of Africa have insisted, changes generally take the form of rebellion rather than revolution; subjects reject the king, but not the kingship.”²⁶

It is also the picture of a very long, though finite, immutable text in which all of its particulars are simultaneously co-present, *in the sense that all of its particulars are equally accessible at a given moment*, as, let us say, the first and the last pages of a printed book—and everything in between—are equally accessible to us. This gives rise to the theory of knowledge as we have understood it since it was invented by Greek philosophy. This theory, this act of spectation, gives us all of the constituent particulars of knowledge architectonically co-present in the instant. “Epistemological awareness seems to coincide with the widespread adoption of writing, probably because the written word suggests an ideal of definable truths which have an inherent autonomy and performance quite different from the phenomena of the temporal flux and of contradictory verbal usages.”²⁷

Wittgenstein asks, implicitly wondering by what picture we are being held captive: “A proposition, a thought, what makes it true—even when that thing is not there at all! Whence this *determining* of what is not yet there? This despotic demand? (‘The hardness of the logical must.’)”²⁸ To this we can now reply. It is a picture produced by literacy: an almost infinitely large text, it seems, wherein all of its particulars are simultaneously co-present in an “instant” without temporal density, in the sense of their all being at every moment equally accessible, as the words being spoken and heard in the oral-aural reciprocity are not. In the light of this

picture (a variation, be it noted, upon our description of sight, abstracted in reflection from the phenomena of seeing) what *is* the case and therefore what *is not* the case is *necessary* and *immutable*: eternal *eideos* (those things that are seen—from the Greek verb *eido*, to see) upon which our *logic* may happily bear. As Cedric Whitman has observed, with literacy “a new idea of permanence is born. . . . Writing has a godlike stability.”²⁹

Whitehead is correct. The whole history of Western philosophizing is but a footnote to Plato; and its repertoire of concepts is, in the final analysis, ruled by this picture of a very large but finite text all of the particulars of which are at every moment equally accessible.

The difference between the Greeks and the Hebrews, as they are known to us through their and our own literacy and as shapers of our own imaginations, is not that between the literate and the preliterate. Our question is: if both Greeks and Hebrews took the word for *word*—*logos* in the case of the Greeks, *dabhar* in the case of the Hebrews—to be their primordial metaphor for reality, why and how do they diverge from what appears a common ground in such a way as to produce two very different conceptions of the world: one, we may tentatively suggest, subject to the reign of the picture of a large but finite text, the other governed by models drawn from the oral-aural reciprocity?

Without presuming to deal with the complex philological and historical issues raised by such a question—I shall continue to appeal to the “text” of my own imagination and the models I find there in light of which I am able to explicate the philosophical puzzles in our tradition—it is nevertheless useful to ask whether the basis, the nature, and the rate of diffusion of literacy among Greeks and Hebrews was different and whether this difference could account for the divergence between the logic of *logos* and that of *dabhar*.

Phonetic signs may be used to stand for any unit of speech. They may become either syllabaries or alphabets. In most cases, alphabets, with tokens for consonants and vowels, are likely to be more economical means for representing sounds. Syllabaries tend to be very complex, sometimes combining with logograms and pictograms. In contrast the alphabet graphically represents “the basic phonemic system.”³⁰ Goody and Watt, characterizing the advantages of the alphabet over syllabaries for the purpose of written discourse, say: “The number of sounds which the human breath stream can produce is vast; but nearly all languages are based on the formal recognition by the society of only forty or so of these sounds. By symbolizing in letters these selected phonemic units the alphabet makes it possible

to write easily and read unambiguously about anything which the society can talk about.”³¹

In contrast, with the Semitic syllabaries social diffusion was slow. “Hebrew culture continued to be transmitted orally long after the Old Testament had begun to be written down.”³² Goody and Watt then quote S. Gandz: “[The introduction of writing] did not at once change the habits of the people and displace the old method of oral tradition. We must always distinguish between the *first introduction* of writing and its *general diffusion*. . . . ‘In the beginning, the written book is not intended for practical use at all. It is a divine instrument, placed in the temple by the side of the ark of the covenant that it may be there for a witness.’ . . . For the people at large, oral instruction still remained the only way of learning, and the memory—the only means of preservation.”³³

Then, by way of summary, Goody and Watt observe:

Anything like popular literacy, or the use of writing as an autonomous mode of communication by the majority of the members of society, is not found in the earliest societies which used the Semitic writing system; it was, rather, in the sixth and fifth centuries B.C. in the city states of Greece and Ionia that there first arose a society which as a whole could justly be characterized as literate. . . . The system was easy, explicit and unambiguous—more so than the Semitic, where the lack of vowels is responsible for many of the cruces in the Bible. . . . Its great advantage over the syllabaries lay in the reduction of the number of signs and in the ability to specify consonant and vowel clusters.³⁴

These conjectures go some distance toward suggesting why the diffusion of alphabetic literacy was more rapid and more extensive than the Semitic system. They also suggest why it was that culture that continued to be transmitted by oral means long after the Old Testament was begun. What remains unanswered is our question as to how two literate peoples, both taking the word as the primordial metaphor for reality, should, *even in writing*, have such different views of what a word is: the Greeks, for whom, in the last analysis, words get their meaning in being parts of an “immutable and impersonal mode of discourse” through which they are related “to some ultimate principle of rational order in the universe, to the *logos*”;³⁵ the Hebrews, for whom words get their meaning paradigmatically in the ultimately inscrutable but unfailingly faithful intentions of Yahweh, manifest in His word-owning, authentic acts of speech.³⁶

The question as to how it comes about that a certain coherent cluster of

metaphors for mediating the world should take root in the most primitive arcanum of a people's imagination is probably unanswerable. The answer has not emerged from a comparison between alphabetic and syllabary writing, the rate and extent of the diffusion of literacy, the degree of general skepticism vis-à-vis a cultural tradition that becomes possible in different ways in the one and in the other. I shall abandon the attempt to answer this.

What we *can* say is that for the Hebrew *dabhar* was always the spoken—more exactly the *speaking*—word; and the speaker of the (just now) speaking word was paradigmatically Yahweh. And it was the *authenticity* and *fidelity* of this speaking word of Yahweh, who calls everything into existence when he speaks, and was the touchstone and the test of *every* word—whether it be authentic, real, and meaningful, or on the contrary empty: *mere* words, or “words, words, words,” as we should say. And this speaking word is not only the *measure* of reality; it is in its very utterance that reality takes up its abode between men and God and among men—literally hanging upon the “breath of God.” W. H. Auden has said: “A sentence uttered makes a world appear.”³⁷

However, *dabhar* means not only ‘word’ but also ‘deed.’ “‘Word’ and ‘deed’ are . . . not two different meanings of *dabhar*, but ‘deed’ is the consequence of the basic meaning inhering in *dabhar*.”³⁸ For the Greeks words get their meaning in being parts of “an immutable and impersonal mode of discourse” related to some ultimate principle of impersonal rational order; for the Hebrews words get their meaning in being expressions of the personal, to *our* ears entirely mutable, but, in secret, unfailingly self-consistent intentions of Yahweh, the speaker and actor par excellence.

Lest the impression persist that here I rely on nothing more substantial than the internal logic of those pictures of the contrast between the Greek and Hebrew imaginations that reflection has educed from my own imagination, set in its ambient tradition, let us briefly consult the work of historians and philologists.³⁹

The first thing to be said is that the word *dabhar* in the Old Testament, even when written down, thereby to become visible, is conceived preeminently as a dynamic *audial* event, inextricable from the crude physicality of the muscular tensions of the face, lips, tongue, and torso that form it and of the speaker's breath that propels it forth. As Boman says: “The basic meaning of *dabhar* is ‘to be behind and drive forward,’ hence ‘to let words follow one another,’ or even better ‘to drive forward that which is behind.’”⁴⁰ And mind you, to say of a word that it has a logic, that it is used thus and

so and not otherwise, that its use in a given verbal matrix is both analogous and disanalogous to its use in others, that it carries with it its own etymological history, is to say that it is affiliated with a certain picture—whether spoken and heard or written and read.

As *dabhar* is pictured as being borne by the breath of its speaker, it has power—as the wind has power, as the muscles of the torso do. It is not *only*, but it is at *least* a force of nature, even as my own spoken words are. There is a difference between the *force* of my words, *as words*, when there is a difference in the force of the breath that propels the verbal tokens forth. “A sentence uttered makes a world appear.” Does any of us doubt this who has seen the world *appear*, then disappear, because of what is said? Do you mean *literally*, you ask? Yes, I am being as direct, as nonfigurative *as can be*. How but by the solemn uttering of words is the worldly reality among men of a marriage brought into being? Would not a “solemnization of divorce” serve more fully to dissolve it? “Ah yes,” you say, “but this world, created and destroyed by the uttering of words, is not so real as the world of nature.” Is it not? And the world of nature, *insofar as it is a reflected reality among men*, does it have its existence other than by the utterance of the words of common sense, of physics, chemistry, biology, geology?

But lest this be taken for a mere fanciful flight, let us digress a moment to an analysis of doing things with words by the Oxford philosopher, J. L. Austin.⁴¹ If Yahweh’s speaking is always a *doing* then we may, following Austin, call his utterances *performatives*. Austin says: “The type of utterance we are to consider here is not . . . in general a type of nonsense. . . . Rather, it is one of [the] class [of] masqueraders. . . . It does quite commonly [masquerade as a statement of fact, descriptive or constative], and that, oddly enough, when it assumes its most explicit form. . . . Grammarians have not . . . seen through this ‘disguise,’ and philosophers only at best incidentally. . . . Of all people, jurists should be best aware of the true state of affairs. . . . Yet they will succumb to their own timorous fiction, that a statement of ‘the law’ is a statement of fact.”⁴² He then goes on to contrast performatives with other sorts of utterances and to give examples of the former. Performatives do not “describe” or “report” or “constate” anything at all, are not “true or false”; and the uttering of the sentence is, or is a part of, the doing of an action.⁴³ By way of example: “‘I do (. . . take this woman to be my lawful wedded wife)’—as uttered in the course of the marriage ceremony. . . . ‘I name this ship the *Queen Elizabeth*’—as uttered when smashing the bottle against the stern. . . . ‘I bet you sixpence it will rain tomorrow.’”⁴⁴ Quite exactly, the uttering of

these performatives “makes it so.” “A sentence uttered makes a world appear.” The world in which hitherto it did not, a certain marriage now exists; the world in which, hitherto there was not, there is now a *Queen Elizabeth*; the world in which, between you and me there was hitherto no relation of waging, there now is. But performatives, if neither true nor false, are by no means infallibly efficacious. Their utterance has to be governed by *felicities*, the most crucial one of which for our purposes is that the performative be uttered with *authority*—that its constituent words not be mere words, idly uttered, but uttered intentionally by the right, that is, authorized, person: “I pronounce that you are husband and wife” by a duly ordained priest.

At this point the reader may well rejoin: “But surely, clever as is this Austinian move, proposed at this point in the argument, there is something more than a little fishy about it. It is all well and good to say with Auden that ‘a sentence uttered makes a world appear’ and by an appeal to Austin’s constative-performative distinction to make it seem not mere poetizing, but unexceptional epistemology or ontology—or whatnot. However, the fact is there *are* after all, constatives—putative statements of fact and descriptions of what is the case—without which we could not transact the routine business of our speech-acts in their convivial setting. What’s more, it is these latter that are the very paradigms of licit speech, since it is by reference to them that there may arise the question of true-false, hence the question of meaningful-meaningless—which we could hardly do without. Utterances governed only by Austin’s ‘felicities,’ however useful, however indispensable even, are not more palpable than the insubstantial fabric of social usage.”

The answer of course is: Yes. There *are* constatives, they are necessary to the transaction of the routine business of our speech-acts and of them we can say that they are true or false. And, yes, they have been the (almost sole) paradigms of licit speech within the philosophic tradition. But the pejorative characterization of performatives as governed only by “felicities no more palpable than the insubstantial fabric of social usage” can come to mind only against the background picture that lends a *more substantial* grounding for constatives than the “mere felicities embodied in social usage.” And what is this picture? Why, the conception of an order more stable than the lively, convivial oral-aural fabric in which “felicities” govern all, viz., the conception of a very large, eternal text by reference to which the meanings of the words and expressions we speak are sustained and by corresponding with which, if they

are constatives, they may be judged to be (eternally) true or false.

The issue then is that of whether our model of “how we do things with words” and how we formulate epistemological questions of meaning and truth with words derives primarily from the unique characteristics of the oral-aural reciprocity, wherein “felicities”—depending upon the “insubstantial fabric of social usage”—govern and to which all other models are subordinate and subject; or whether, alternatively, it derives from the physical reality of a written language, wherein ‘God,’ ‘Justice,’ ‘Soul,’ ‘Good,’ and the rest are thought to take on a life of their own, independent of the allegedly messy insubstantiality of the mere convivial backing of the fabric of social usage—so it is supposed by this model—whereby their meanings are related to some ultimate principle of natural order in the universe, that is, to the *logos*. Surely we have come far enough in this discussion so that the alienation of ourselves from our convivial responsibility for the meaning of meaning and truth given in this picture can no longer appear to be an option.

The first of the above is a Hebrew model, wherein the “insubstantial fabric of social usage governed by the ‘felicities’” is paradigmatically nothing other than the “space” between Yahweh and Israel, brought into being in the utterance of their mutually covenanting words; the latter, as we have seen, is a Greek model. It is the Greek model by which, with occasional minor remissions, our imaginations have been immured in the philosophical tradition.

Now let us return to an amplification of the Hebrew model. The *dabhar* of God then does not replicate the particular *logoi* of an eternal and finite text, and by so doing, conform to *what is the case*, that is, to what is by virtue of this, eternally true. His *dabhar*, even as do yours and mine, “makes a world appear.”

By the word of the Lord were the heavens made,
And all their host by the breath of his mouth.
(Psalms 33.6)

For he spoke, and it came to be;
he commanded and it stood forth.
(Psalms 33.9)

Notwithstanding, the Israelites knew full well the difference between, on one hand, words that were real doings and makings and, on the other, *mere* words, feckless and inefficacious words not attended by the “felicities.”

"They know of very promising words which did not become deeds; the failure in such instances lies not in the fact that the man produced only words and no deeds, but in the fact that he brought forth a counterfeit word, an empty word or a lying word which did not possess the inner strength and truth for accomplishment or accomplished something evil."⁴⁵ A counterfeit, empty, or lying word is a disowned or unowned word, hence a *mere* word—that is, speaking quite directly, "sound and fury signifying nothing."

The second thing to be said about the *dabhar* of God is that it is *personal*. For all that it is powerful like any force in nature, for all that, as a performative, it "makes a world appear," *dabhar* is that in which Yahweh himself appears as personal—even as this is so for me, insofar as you (and I) take me to be a person. God's being is neither *reducible* to his speakings which are doings; nor is he *separable* from these speakings-doings. It is this that leads Boman to say that "the *Jahvist* knew the Egyptian belief in the emanated divine creative word, rejected it as un-Israelite, and traced the entire creation back to Jahveh";⁴⁶ and later to say: "Jahveh's word belongs not to the physical but to the spiritual sphere; by it his will comes particularly to expression."⁴⁷ In the same way *my* will, at once manifest and hidden—from you, from me, for it is only Yahweh "from whom no secrets are hid"—comes particularly to expression in my words/deeds.

The Greek *logos* derives from the verb *lego* (to say, speak).⁴⁸ It is worth our time briefly to trace the evolution of its use in Greek. *Lege* was used by Herodotus and the tragedians to mean "say on." Plato used *legois an* of oracles to mean "to say," "declare." Sophocles used *legein deinos* of orators to mean "to speak." Xenophon uses *legein* to mean "to boast of," "tell of." Plato, with *labe to biblion kai lege*, uses it to mean "to recite what is written." However, Liddell and Scott observe that the sense of the Latin *lego* (to read) only occurs in compounds.

Logos itself can mean, in Homer, Plato, Herodotus, Aeschylus, "word," "words," "language," "talk," "saying" (maxim), "speech," "discourse," "story," "narrative," "fable." And it is frequently contrasted with *mythos*, a mere fable, and with *historia*, regular history such as can, by reason of the existence of written records, be distinguished from the highly edited recollections in a merely oral tradition. There is in Greek, on the other hand, *epos*, which could mean "word," "tale," "story," "lay." From *epos* of course we derive our *epic*.

Boman, relying upon Boisacq's *Dictionnaire étymologique de la langue Grecque* and Passow's *Handwörterbuch der griechischen Sprache*, asserts that

the “basic meaning of the root *leg*—[of *lego*] is, without doubt, ‘to gather’ and indeed not to gather pell-mell, but to put together in order, to *arrange*. This basic meaning, which is so characteristic of the Greek mind, explains the three principal meanings of the concept which are so hard for us to reconcile: speak, reckon, and think.”⁴⁹ Boman then goes on to conclude that “only gradually did *logos* come into use as the designation of ‘word’; in Homer the term is infrequent (he uses *mythos* in place of it), and it occurs only in the plural signifying ‘word *not according to its external form, but with respect to the ideas attaching to the form.*’”⁵⁰ And straightaway we must remark the picture, embodied in these words, of the distinction between the *external form* and the *idea attaching* to it, as if the connection between the act of uttering (writing) the external (visual) form and meaning (owning) the ideas attaching to them is a purely extrinsic one: a picture very much more difficult to entertain when contemplating the relation between the “external” form of the *sonic* word that I am speaking and the ideas “attaching” to it. One thinks here again of Wittgenstein: “When I think in language, there aren’t ‘meanings’ going through my mind in addition to the verbal [“external forms”] expressions: the language is itself the vehicle of thought. . . . Is thinking a kind of speaking? One would like to say it is what distinguishes speech with thought from talking without thinking.”⁵¹ The connection between ideas and their external form, *when one draws one’s picture from speaking*, is *intrinsic*. The pathic, in this case, still dominates the gnostic.

Boman continues: “From the time of Pindar, the philosophical poets, and the first historians [*logos*] became one of the most frequent words in the entire Greek language. The deepest level of meaning in the term ‘word’ is thus nothing which has to do with the function of speaking—neither dynamic spokenness, as was the case in the entire Orient, nor the articulate-ness [that is, the orderly gathering and arranging of words in speaking] of utterance—but the meaning, the ordered and reasonable content. . . . It is characteristic of the Hebrews that their words *effect* and of the Greeks that the word *is*.”⁵²

The historical and philological data on these matters, however, are of course extraordinarily complex; and the range of the ways that *logos* is used in authors of differing historical periods and even within a given author is extensive beyond cataloging. That *logos* could mean “speech,” “speaking,” “story” and could be associated with the very physical activity of breathing,⁵³ no less than the Hebrew *dabhar*, is beyond doubting. What is absent in Greek thought is the picture of a *paradigmatic* speaker, whose speech makes

a world appear where hitherto there was nothing, *including his words themselves*. The paradigm of the “speaking word,” whether it be man’s or God’s, is always God’s word spoken to man in covenant. And this is the sense in which we can say that Yahweh is personal in a sense unassimilable to any use that the Greeks might have been capable of imagining in referring to Socrates, Achilles, or Oedipus as persons (and the force of the word would be different among even these three cases); or in trying to conceive of Zeus or Eros as persons. The conceptual resources for doing so were quite simply not at hand.

Now let us examine yet more closely the internal logic of this picture, using for convenience Austin’s notion of a performative utterance as example. Above I said that quite directly the uttering of a performative “makes it so.” By saying, “I name this ship the *Queen Elizabeth*,” I actually create the *Queen Elizabeth*, providing of course that I am the authorized person for naming this ship and all the other felicities obtain. In the world in which there is now a *Queen Elizabeth*, hitherto there was not. A distinction can be drawn between the uttering of my words, “I name this ship the *Queen Elizabeth*,” on one hand; and the authorized world that is made to appear by their owned and authorized utterance, on the other. To be sure, if I am the authorized person, my act of uttering the words and my act of making a world appear are one and the same. Yet the words I *chose* to utter were, prior to my choosing to utter them, contingent—that is, equally likely to be uttered or not to be uttered—since I equally could have said: “I hereby pronounce that you, ship, are *Queen Elizabeth*” and the same world would thereby be made to appear. I stand then in a slightly different relation of transcendence over the words I utter from that in which I stand over the world that, in uttering them, I make appear; and my as yet unuttered words are in a contingent relation to my *act* of uttering, which is distinguishable from that of the world that in uttering I make appear. If we follow the implications of this metaphor, then we see that Yahweh not only transcends the world he makes appear, he transcends the very words he utters by which it is made to appear. It is no less the case that the world he makes appear was contingent when there was as yet nothing as also the words were contingent, before they were uttered.⁵⁴

I have taken the time to do this unravelling in order to show decisively what is missing in the Greek imagination: a paradigmatic *speaker* whose speech makes a world appear, and who is *personal* in a sense absolutely unassimilable to any other. Since *dabhar* is always paradigmatically the speaking word of God—even when it is in a text—it remains *alive*, lively

in an oral-aural context. The essential content of the biblical texts is God's performative speech-acts. I have also wished to show that even I—for you, for me—am more than I ever have said or could say, even though who and what I am appears equivocally in what I say; and that all of this is implied by the picture of Yahweh as well, with this difference: for us, the equivocal, because finally unsearchable, relation between Yahweh and his words is deemed to be authentic and unfailingly faithful. Yahweh is faithful; you and I are not. Yahweh transcends all of his deeds, which before he does them are absolutely contingent. Even so, he can fully *own* them all. They depend upon him and manifest his power, but he does not depend upon them.

This is the picture missing from the Greek imagination. Without it *logos* can never have the same force as *dabhar*. Indeed, *logos*, being subject to the gravitational pull of the picture of the eternal passage of the planets through their orbital paths, never beginning, never ending; or of the cycle of the seasons; or the cycles conceived by Anaximander wherein, it appears, *to apeiron*, the unlimited, suffers limitation by the ordination of *moirai* [portions] to become earth, fire, air, and water and by mixing with one another to form the world of *genesis*, of passing in and out of being, then makes “reparation for their injustice according to the disposition of time,” becoming once again earth, fire, air, and water and, in due time, to become again *to apeiron*—in the context of this picture, *logos* came, we may suppose, more and more to be disaffiliated with the lively activity of speaking and came to stand instead for the finite orderliness and “arrangement” of *these very cycles themselves*. Even Heraclitus, who seems to have supposed that behind the flux of the world there was a dialogical ordering principle, which he called *logos*, the oppositions within which were conceived as like the speakers in a colloquy, could not, without the picture of a paradigmatic speaker, rise above the thought that this cosmic *logos* was breathed in with the air with which we speak.⁵⁵ This dialogical ordering of the flux of reality was not subject to the providence of the world-creating hence world-transcending personal God, but rather was subject to an impersonal *logos* which “inspires” us as the air inspires us as we breathe it.

To use the Austinian distinction between performative and constative: we might fancy that the Greeks drew their primordial metaphors from the order and regularities of the natural world—insofar as these are expressed in the secular turns of the cosmos which are taken to be *given* and *never-ending*, as the world of men conspicuously is not—hence the fit subject for the use of *constatives* purporting to express what (eternally) *is* the case and

thus may be true or false; whereas the Hebrews drew theirs from a reality that they observed as having been brought into being among men and between men and God by the felicitous and authentic, that is, covenanted utterance of *performatives*.

Let us recall the question that has taken us so far afield. In discovering that the necessity-contingency contrast may equally derive “experientially” from either the picture of seeing or of hearing, although discovering, too, that their uses may vary according as one picture or the other is superordinate; and in discovering that a distinction may be made between a *relative* and an *absolute* contingency; even discovering that relative contingency is comfortable with necessity, when the use of the latter is governed by our musical model; we came to raise the question of whether a logical relation *in time*—for the existence of which Polanyi seems by implication to have staked a claim—has to be subject to a finite set of possibilities capable of being unfolded in a finite length of time, as all of the possible music that is subject to the eight-tone scale is actually capable of being composed and played in a finite, even if in a very long, time. And in asking this question, we recognized that it is really the most general question that can be asked as to the nature of things.

When this issue was first raised and temporarily set aside, I suggested that this inquiry would lead us back to my analysis of the speech-act, in which I have held that it can be at once *absolutely* contingent, yet subject to the suasions of motifs, thereby expressing insofar as motivated a kind of lawful unfolding, a kind of necessitation. Furthermore I claimed that the heart of actual speech is the radically contingent, absolutely novel, and underivable act of owning and owning up to my very particular words; that authentic speech is the act of owning my own words *before you*; that to be a person is nothing other than for me to be able before you to own my words. Finally I suggested that this would lead us to contrast the conceptions of reality found in the imaginations respectively of the Greeks and of the Hebrews.

Logos, its radical being *leg* (to reckon [count], gather, order, arrange), as it became subject more and more to the Greek preoccupation with *Ho peri phuséos historia*, the eternal cyclical passage of nature through its finite course, became disaffiliated with its use as “word,” “story,” “narrative.” This, I suggested, was because in the Greek imagination there was no countervailing picture of a paradigmatic, personal speaker. Therefore *logos* came more and more to stand for the *orderly arrangement* itself, expressed in these cyclical turns. This is perhaps especially obvious among philosophers,

though surely it is equally this *logos* that will not suffer itself to be deranged by the hybris of Oedipus, a triumph of primordial and finite order fully celebrated by the final chorus in Sophocles' play.⁵⁶

Throughout this discussion I have used the image of a large but finite text all of the *logoi* of which are simultaneously co-present, in an "instant" without temporal thickness, *in the sense of their all being at every moment equally accessible*, as the words being spoken in the oral-aural reciprocity are not. Alphabetic literacy with the orderly arrangement of letters in a written word, of words in a written sentence, gives rise to the classic conception of logic, an immutable and impersonal mode of discourse which the physical reality of words on a page of written text enables to take on a life of its own—a life conveyed to it by us and then alienated by our picture from our intentional mindbodies. If then we take the orderly arrangement of the *logoi* of this finite and immutable text as the primordial metaphor for reality, what can be *said*, what *is the case*, and what *may be the case* are strictly and immutably determined by what appears there.⁵⁷ True knowledge, *epistème*, is precisely descrying the *logoi* eternally standing in this text, in spite of whatever impedance there may be. Reality is exhaustively embodied in this immutable, finite text. There may be some sense in which in reading the immutable text, we are surprised by a *relative* contingency that appears therein, not having previously read it, even as we may be surprised by the *relative* contingency of the notes appearing in a hitherto unheard composition in the eight-tone scale. However, there is no *absolute* contingency in this text, either in the sense illustrated by the case of aleatory music or in the sense of that in a personal speech-act. The pressure of this large-scale image upon the imagination is such that what is the case and what may be the case (there is no real distinction) are strictly necessitated by the rules implicit in the relations among the *logoi* of the immutable text.

If we take as the *arché* for reality either an immutable, finite text or a musical schema like the eight-tone scale, we shall have to concede, even though the musical case clearly will yield a far more dynamic view of things, that there can be *only relative contingencies* in the world. Does holding that relations in time may be *logical* entail that reality itself is subject to a finite set of possibilities capable of being exhaustively unfolded in a finite time? Confined to the two models above, we are obliged to say: yes—in all the senses of 'logical relation' so far examined.

How, though, would things differ were we to take seriously the inherent logic of our picture of the speech-act as *arché* for reality? More exactly, how

would they differ were that *arché* to be the world-creating speech-act of the paradigmatic speaker for Hebrew thought, Yahweh?

When earlier I asked what it is that is unique to my act of speaking, I said that intuitively I feel it must be at once motivational, that is, subject to the suasions of motifs; and yet *absolutely* contingent. The import of this intuition seemed to be nothing less than that my speech-act may rely upon an analyzable physical, social, psychological setting; be susceptible of interpretation in terms of various alternative linguistic theories, and in these various senses subject to laws of causality; be tractable to the suasions of the syntax, grammar, and semantics of the native language which, in speaking, I take up—and in all of these senses, at least, subject to a kind of necessitation; but that *at the same time* it is *absolutely* contingent. It is well to remember, too, that there have been two senses of *absolute* contingency that I have developed in contrast to *relative* contingency, on their face very different: that governed by the model of the randomness and radical underivability with which any note in a “succession” follows a given note in aleatory music; and that deriving from the model of the act of authentically owning one’s own words in a speech-act.

Of this latter I said that its heart, as *speech-act*, is the absolutely novel and underivable act of owning one’s words *before another*. Indeed, I went so far as to say that for one to speak authentically (that is, to own one’s words before another) is precisely what, subject to this picture, we understand by being a person; that to *be* a person is nothing other than to be able before another to own one’s words—with the warning that such congruence as may obtain between the utterance of words and the speaker’s profoundest endorsement of them is the work of grace.

Now leaving aside all of the tempting reductionistic pictures of the speech-act by which you might be ensnared in reflection, your language “going on holiday,” I should suppose that what I have just said in the preceding paragraph about the heart of the speech-act would strike you as quite obvious and uncontroversial. After all, being as “good as one’s words” as opposed to being absent from them is a distinction we rely upon a thousand times a day: to make sense of the difference between what I *utter* but do not *say* to the person with whom I live in intimacy; to make sense of the difference between what I *tell* but do not say to my psychiatrist, to my colleagues, to a passing stranger; to distinguish between what in good faith I *thought I meant* and what I discover I *did in fact* mean, or how I “choose” to interpret my dreams, how I “choose” to *remember* them. This incongruence between what I *utter* before another (and to myself before another) and

what I *in very truth*, before Yahweh, mean—it being him alone to “whom all hearts are open, all desires known, and from whom no secrets are hid”—is *for me*, according to this view, the fundamental problem of existence as a person among persons.

As uncontroversial as these views may seem, I want to claim that we hold them only because our understanding of what a person is, what relations of personal fidelity are, what authentic speech is, are subject to the suasions of the model of Yahweh as paradigmatic speaker. The implications of this picture are encountered almost everywhere in our unreflecting understanding of ourselves in the modern West, even though increasingly technological and behavioristic models seduce our imaginations when we are self-consciously reflective. In this respect we are all, as William Barrett once remarked, *de facto* Judeo-Christians.

Now, following the logic of the picture of Yahweh as paradigmatic speaker, I want to claim that the heart of my speech-act, namely, my act of owning my words before you, is *absolutely* contingent, no less radically underivable from the physical, social, psychological causalities or from the suasions of melodic speech or syntax that are its conditions than is the note that is imagined as randomly “succeeding” another note in aleatory music. Yet I claim that *this absolute contingency is not mere randomness*. This is so because the logical-grammatical rules governing the use, hence the force, of ‘contingent’ when applied to the act of owning my words before I have actually done so are importantly different from those governing its application to an event that we try to imagine as random. A random occurrence, we found, is not *strictly* conceivable, since to be random it would have to be entirely without context—unprecedented, unpredicted because by definition unpredictable, underivable from antecedents, a surd. But we equally saw that to imagine randomness is to imagine *at least* an *oppugnant other-than* of my sense-giving, meaning-discerning mindbodily integrity, which is precisely to introduce a context. By contrast, for my act of owning my words to be absolutely contingent it not only need not be context-free, but, on the contrary, *requires* a context: the logical/ontological conditions that are the actual premises of my existence as a person. My act of owning my words presupposes these but is not reducible to nor derivable from them. My speech-act as *owning my words* is not *caused*; but neither is it *uncaused*. To suppose otherwise is to commit a category mistake that *reduces* my act of speaking for myself to something other than itself.

Such a claim cannot be proven by a philosophical argument. Its sole warrant would come from your own existential intuition that it is this way

in your *own* acts of owning your words. I would not underestimate the extent to which our ethos alienates us from this intuitive certainty; but I would also ask: if *this* is not to be trusted, how can *anything* be?

It is important to notice also that if you do in fact have this intuition in regard to your acts of taking responsibility for your own words—which is, in fact, to take responsibility for yourself—the question as to whether you might be illusioned in this intuitive certitude does not arise. For this is not at all an issue having to do with whether or not you may at the moment of this intuition be subject, unbeknownst to yourself, to some heteronomy. For example, you might produce an elaborate and highly plausible rationale for doing something that *we* know you do in obedience to a suggestion during hypnosis. The act of standing behind what you do and say—in this case making sense to yourself by means of your rationale of what you are doing in order that in that moment you may claim it for yourself and *as* yourself—this act of taking responsibility for yourself and your own history cannot be “reduced”; its logical heterogeneity cannot be impeached by the heteronomy to which you are, *even as you are in the very act of owning your words*, unwittingly subject. Our freedom is our reflexive power to speak in our own names—to answer, when addressed: *It is I*—even though notwithstanding we are finally opaque to ourselves.

There are then at least these two differing, logically heterogeneous senses of absolute contingency.

For all this to be possible, then, it is necessary for us to be able to say that even though God’s acts of owning his own words and deeds are absolutely underivable from antecedent, eternally efficacious *regulae* such as those constituting an algorithm, a logical calculus, a musical schema, the maxim or *telos* or motif of a moral action, the *logoi* of a large but finite text—even those of a particular intention—God’s acts of owning his own words and deeds are inscrutably but abidingly implicated with his very identity, as he has chosen to manifest himself to men as “*I will be that I will be.*” When Yahweh—“I will be that I will be”—identifies himself by telling his name, he manifests his identity as *faithfulness*. Any other identification of Yahweh than this one is derivative and runs the risk of idolatry, of presuming to say *how* his words and deeds are implicated with his identity, for, as he says, “my thoughts are not your thoughts; nor my ways your ways.” Even the prophets presume to say only with fear and trembling how his words and deeds are implicated with his never failing but unsearchable identity with himself.

It is only in this way that we can at once say of Yahweh’s acts of owning

his words and deeds that they are underivable, hence *absolutely* contingent, yet not merely random, for the ultimate *context* of their meaning is the archetypically *personal* "I will be that I will be." And it is in the light of this picture of the paradigmatic speaker that I depict the heart of my own speech-act as at once *absolutely* contingent, yet not merely random; as harboring the incongruence—except by grace—between my utterances and their full ownership by me, since of myself I cannot say, "I will be that I will be." This picture also contains the means whereby this incongruence in myself may be overcome.

You may well find that the explicitation of the logic of this picture only serves to darken understanding and render still more problematic than before its uses as a metaphor for reality. Yet I dare to claim that this image, complex and paradoxical though it is, stands with others at the heart of our Western imagination.

How then, in the light of this new picture, do we answer our most general question as to the nature of reality, namely: if we claim that some relations in *time* are *logical* in the sense of being a formal property holding among things in the "contingent world," would this entail that reality *itself* is subject to a finite set of possibilities and is therefore capable of being unfolded in a finite length of time? Whether the universe is like Bach's First Prelude, admitting relative contingencies, or like a large but finite text, the answer to our question has to be: yes. If, on the other hand, reality were conceived after the analogy of aleatory music as I have strained to define it, there could *be* no conception of reality, no conception of randomness, no conception of order; of course, not even a conception of conception.

Applying then our new picture, derived from Hebrew modes of thought, we can tentatively say: there *can* be a *logical* relation between things in *time* without it being entailed thereby that reality itself is subject to a *finite set of possibilities*. If reality is conceived after the analogy of the speaking *dabhar* of Yahweh, the paradigmatic speaker, then it follows that the world's existence as such, as well as each and every one of its particulars, is *absolutely* contingent, even as God's faithful ownership of his actual and particular words and deeds is *absolutely* contingent—that is, *absolutely* equally liable to happen or not to happen. At the same time, however, though these words and deeds of God are radically underivable from any eternally binding *regulae*; and though the way in which these are implicated with his identity as "I will be that I will be" is not a priori searchable; *this absolute* contingency is not the contingency of the absolutely random—which, as

we have seen, could not be recognized even, were it, *per impossible*, to exist—but rather is that of the *unconditioned personal act addressed to other persons: personally owned words before an other* who takes them up and covenants himself with them.

This is why modern Western science, for example, in sharp distinction from that of Greece, is inductive, empirical, and “experimental.”⁵⁸ It is *inductive* since, given this Yahwist picture of reality, no alternative is open to it: the nature of a contingent order cannot be inferred from eternal and eternally binding *regulae*, for according to this picture none exist. It is *empirical* because it is the very particulars of the world open to our sense experience that, though *absolutely* contingent, are the very words and deeds of God. Finally, it is *experimental* because in experiment we expose ourselves to the *disconfirmation* of our hypotheses as to the nature of the world’s uniformity, even as Israel, in apostasy and idolatry, exposes itself to judgment and thereby to the disclosure of what Yahweh emphatically is *not*. But even more, experiment is the act whereby we take up and covenant with the words and deeds of God. To “understand” God’s will is to *obey* its particular manifestations, knowing that the way in which these are ultimately implicated with his will is beyond our comprehension. Experimentation with empirical particulars is precisely a form of this obedience. And the contingent “uniformity of nature” is the image of God’s never failing but ultimately inscrutable fidelity. The invention and spread of modern Western science, to be sure, is unimaginable without the centuries of tuition from classical rationalism. However, without the intellectual revolution wrought by the diffusion throughout the West of that repertoire of concepts deriving from the Yahwist picture of reality, it probably could not have risen above refined taxonomy.

The import of our being able to answer our question thus may now be stated in very general terms. In the light of this Yahwist picture of reality we have no need to embrace a kind of Machian positivism which, though it rightly emphasizes the particularity of that through which we achieve our knowings, does so in such a way as to deny a larger comprehension upon which our knowings may bear. Nor do we need to share the presumption of various forms of rationalism which, while rightly affirming the existence of this larger comprehension, are tempted to imagine it to be, in principle at least, exhaustively fathomable.

I have analyzed the pictures of seeing and of hearing derived phenomenologically from our dynamic experience of seeing and hearing and have allowed the findings to bear upon our uses of our fundamental words,

'form,' 'order,' 'gestalt,' 'meaning,' and most recently 'necessity' and 'contingency.' I have shown how much subject to the picture of seeing our uses are and how, in particular, variant uses of 'necessary' and 'contingent' become possible when we allow them to follow the logic of the audial picture. There are at least two further conclusions from this analysis and its implications worth remarking. First, there need be nothing problematic about the innovations in the uses of 'logical,' 'premise,' 'anterior,' and their cognates introduced by Polanyi. We have seen that, bracketing out once again the most general question about reality, there is nothing incoherent in saying, as Polanyi does, that "our acceptance of what is logically anterior is based on our prior acceptance of what is logically derivative, as being implied in our acceptance of the latter" (*P.K.*, p. 191). For this is to say that when we ring the changes on uses of our fundamental words in this way there ceases to be anything in the least scandalous in holding that any set of *believings* and *evaluings* in one moment of the temporal succession within which I am engaged in inquiry, whether these be *explicit* or *tacit* (perhaps unknown and even unknowable to me), are the *logical premises* of what subsequent discovery discloses and are therefore *logically anterior* to these discoveries. On the contrary, holding that there is no such scandal will serve to elucidate the actual nature of the processes of coming to know, of making acknowledging affirmations, and of upholding our knowings. And this it does by showing that all these are processes in time among which, in addition to the *causal* relations that obtain among their analyzable particulars, there are *motivational*, which is to say irreducibly *logical*, connections.⁵⁹ Viewing matters thus appears to suggest that "intelligence," the quest for meaning and orientation, a sense of the hanging togetherness of things and an existential need for sense in its ambience, is an irreducible demand of all sentient creatures.

For in analyzing the structure of the Bach Prelude we were able to see that there may be notes that are *relatively* contingent in relation to one another; that claiming this of their relations is not inconsistent, *in this picture*, with claiming that their relations are *necessary* (in that sense appropriate to the audial picture). Finally, we saw that even as the temporal sequence of heard notes C, E, G, C/E, G, C is one in which the *logic of melody* itself demands that the second C pretend for me the E, G, C that follow it and retrotend for me the C, E, G that precede it, so also will the "logically derivative" retrotend the "logically anterior" and the "logically anterior" pretend the "logically derivative." We may now say, in short, that this is unproblematically a *logical* relation—

albeit not one conceivable within the limits of our picture of seeing.

The second conclusion is that these innovations appear to surface and gain ascendancy in Polanyi's imagination because the alternate ways of picturing reality instituted by the dynamic model of Yahweh's spoken *dabhar*—in contrast to the static model of an eternal *logos*—are a part of his intellectual inheritance from the beginning.

Can support for such claims be found in Polanyi's writings?

VIII

What are the ways, if any, that images derived from this Yahwist picture of the nature of reality and of man's knowing relation to it, never or rarely found in epistemological treatises in the philosophic tradition, entered into Polanyi's imagination and disposed him to mount a polemic against the excesses of Enlightenment views and to undertake the articulation in *Personal Knowledge* of a postcritical philosophy?

To say the least, the import of the evidence is ambiguous. In the first place, on their face some of Polanyi's express and implied views on religion and cognate questions seem antipathetic to the Yahwist picture. There are for example serious equivocations in his analysis of the fiduciary basis of our knowing. At certain junctures the emphasis is upon the inevitability of our being moved by sometimes more, sometimes less, archaic mindbodily tacit or explicit believings as the (logical) condition of our knowings. If we are *explicitly* moved by these believings—subject to the qualifications that I have held throughout—they are reflected, hence tend to be that to which we give assent or that upon which we rely. If however they move us *tacitly* then, at least until reflected, our "assent" or "reliance" is of a rather different order. In neither of these cases can (good) faith (*fiducia*) be construed as *pistos*—the New Testament translation of the Old Testament *he'min* concept which means "trust" and "obedience" before the preeminently personal God.

Secondly, Polanyi seems tacitly to assume that holding or coming to hold a (Christian) religious belief is primarily or usually an explicit undertaking: explicit in the sense that one initiates a praxis governed by a ritual the outcome of which will be a knowledge of God. This is worthy of remark for three reasons. First, for all his appreciation of the fact that "our believing is conditioned *at its source* by our belonging" (*P.K.*, p. 322; emphasis added),

he speaks as if religious belief is something mainly affiliated with an established cult and practice to which one comes late from within the ambience of the picture that one both *has* and is *in the midst of*. It does not, in other words, strike him that the whole intellectual framework of a culture may not only have archaic origins in man's religiousness, as both the Greek *logos* doctrine and the Hebrew *dabhar* doctrine do. Nor does it occur to him that that culture may continue to harbor in itself, long after these explicitly religious roots have been forgotten, metaphors and motifs that tacitly propose ways of apprehending one's situation in the world of birth, time, and death and intimate modes of affection and action in relation to nature and one's fellows that do the work of religious forms and even may have a religious weight. In short, sometimes his views of religion are those of the Enlightenment: not in being in principle skeptical, agnostic, or atheistic, but rather in implying that authentic religiousness is something that one *achieves* over and above what we are all given in our "nonreligious" culture as such, rather than as something that is visited upon us as God's radical, personal otherness.

The third reason for remarking his view of religious belief as the outcome of an explicit praxis, a *search* for God, is in order to oppose it to the view of Hebrew thought that while Yahweh is *unsearchable*, he *reveals* himself by overturning the very feasts, sacrifices, and rituals of those presuming through the mediation of these to "know" him. Understood in terms of Hebrew models, coming to "know" God is just the ultimate form of personal knowledge; what is "known" is personal par excellence: knowing is hearing/obeying.

The assumptions that religious belief is explicit assent and that religious practice is a search for God being made, Polanyi chooses the *via negativa* of the *Mystic Theology* of the Pseudo-Dionysius as one of his models. From the standpoint thus provided he observes: "The religious mystic achieves contemplative communion as a result of an elaborate effort of thought, supported by ritual. By concentrating on the presence of God, who is beyond all physical appearance, the mystic seeks to relax the intellectual control which his powers of perception instinctively exercise over the scene confronting them. His fixed gaze no longer scans each object in its turn and his mind ceases to identify their particulars. The whole framework of intelligent understanding, by which he normally appraises his impressions, sinks into abeyance and uncovers a world experienced uncomprehendingly as a divine miracle." And he further observes: "Since the *impersonality of contemplation* is a *self-abandonment*, it can be described either as egocentric

or as selfless, depending on whether one refers to the contemplator's visionary act or to the *submergence of his person*" (*P.K.*, p. 197; emphasis added). I do not quarrel with this mystical theology as such; and I will concede that on its face it comports happily with Polanyi's general views on the nature of an inquiry. Even less have I any interest in polemically opposing Isaiah's conception of man's fundamental relation to God to that of the Pseudo-Dionysius. My concern rather is with the question of whether Polanyi's views of religion are congenial with Old Testament images. And I have called attention in the quoted passages to Polanyi's recognition of the "impersonality" of contemplation, of "self-abandonment," and of the "submergence of the person," all of which seem, on their face, problematic emphases, if my case is to be sustained.

There is a complementary theme that needs to be remarked. Because Polanyi relies so heavily upon the notion of indwelling, including, perhaps especially, that form of indwelling by which an apprentice intellectually inhabits the mind of his master, he fails, I think, explicitly to acknowledge and make a philosophical point of the radical *otherness* of another person in relation to oneself. For example he argues, incontestably of course, that "a responsible encounter [with another person] presupposes a common firmament of superior knowledge" (*P.K.*, p. 387), and he goes on to elaborate this claim as follows: "Our love of harmonious being makes us study living shapes; our pleasure in the ingenuity of living functions upholds embryology and physiology; our love of animals sustains the study of their behaviour; and as we finally ascend to human companionship, we necessarily arrive also beyond it, by finding a spiritual home in the society on which this companionship between two equals can be released only if they share a convivial passion for others greater than themselves. . . . The partners must belong to each other by participating in a reverence for a common superior knowledge" (*P.K.*, p. 378; emphasis added).

Now it is noteworthy, as I suggest in emphasizing the last words in the above long quotation, that you and I are here depicted primarily as mutual creatures of a convivial order by reason of our joint admiration of the "superior knowledge" of our cultural heroes, rather than depicted as having made a mutual, convivial, covenanting response through our mutual speech-acts wherein a world is made to appear. This "course of progression [of] our convivial passions," which "undergo a fundamental development" (*P.K.*, p. 378), is the *convivial* correlate of Polanyi's ontological doctrine of emergence. We convivally ascend from "love of harmonious being" to "pleasure in the ingenuity of living functions" to "love of animals" to

“human companionship” and beyond to our mutual spiritual home in “reverence for a common superior knowledge”—which ascension is the basis of that conviviality. In this course “*the decisive break* occurs when we accept another person’s *superior knowledge*” (*P.K.*, p. 378; emphasis added), not, as we would suppose in terms of the Yahwist picture, when we encounter another person’s radically contingent personal otherness in his lively act of speech, in his owning of his words before us, in his *dabhar*.

No doubt all this is embarrassing to my claim that Polanyi’s innovations in his uses of ‘logically derivative,’ ‘logically anterior,’ and the like surface and gain ascendancy in his imagination because the alternate ways of picturing reality instituted by the dynamic model of Yahweh’s *dabhar* are a part of his intellectual inheritance from the beginning. However, it is worth noticing that of the two lines of argument drawn from *Personal Knowledge* one has explicitly to do with his views of our knowledge of God; and the other has to do with the nature of the conviviality that holds among the denizens of a cultural tradition.

Even so, the fact that his is very bad Yahwist “theology,” (which as theology is, along with that of the closing sections of *Personal Knowledge*, pp. 402–5, best forgotten, as Polanyi later himself quite deliberately chose to do), should not cause us to overlook the less explicit and possibly much more telling images that guided his way of questing after “questing” and his way of reflectively expressing, in the medium of his chosen words, the nature of his questing when it was reflectively found.

I want therefore to suggest that the decisive motifs of his thought—those that caused him to wish to and enabled him to mount and sustain a polemic against the critical tradition of the Enlightenment—are embodied in images of the *personal*, of *knowing as obedience and responsibility*, of *the fiduciary mode of our being mindbodily in the world*, of *our calling*, and of *the inexhaustibility of what is real*. If this case can be sustained, it will mean that the “theology” that tacitly informs Polanyi’s thought, the images that form the picture that he at once *has* and is *in the midst of*, is at bottom biblical in derivation; and is in any case certainly different from his explicit theological utterances.

The word ‘personal,’ central to the identification of his fundamental task, is one that appears in dozens of different contexts in *Personal Knowledge*, with dozens of different nuances. For example, the rapid scanning movements of Polanyi’s eyes, for all of their apparent physiological “impersonality,” are understood by him as *personal acts*, because he always regards them—as he should—from within his own personally centered

tonic mindbodily integrity. He says: "The standards of intellectual satisfaction which urge and guide our eyes to gather what there is to see, and which guide our thoughts also shape our conception of things. . . . The muscles of the eye adjust the thickness of its lens, *so as to produce* the sharpest possible retinal image of the object on which the viewer's attention is directed . . . [and] *this effort anticipates* the manner in which we *strive for understanding* and satisfy our desire for it, by seeking to frame conceptions of the greatest possible clarity" (*P.K.*, pp. 161, 96; emphasis added). Of these claims I earlier said that their implications are both plain and shocking, that even as my thought gropes its way toward meaning and intelligibility, obedient to standards of intellectual satisfaction whose accreditation and endorsement by me are implied in that very obedience, so also my eyes, even though subject to biochemical, optical, and physical laws, as *organs of vision situated in my mindbody*, as, that is to say, the power of seeing situated in the world, grope their way toward visual sense by being subject to standards for the achievement of *that kind of sense*. These gropings are taken to be *personal acts* since Polanyi always approaches and describes these powers in language whose conceptual and metaphorical setting is his own personally centered, self-transcending mindbodily integrity in the world. The picture that Polanyi both *has* and is *in the midst of* as author of *Personal Knowledge* is one in which he has taken and maintains a stand within his own self-transcending personal center. It is out of this center that reflection always moves and to which it always returns, drawing its metaphors from the picture so centered. The many variant uses of the word 'personal' throughout are therefore governed by the logic of his always personally centered and recursive reflection. His personhood flows downward from its self-transcending vertex, conceptually integrating all of the "lower" levels of his being to his self-transcending personal center. *Beginning here*, he can only take offense at all the forms of reductionism from personal existence with which Critical thought abounds; *remaining here*, he is insulated against the seducements of the reductionistic style and inertia of Critical thought.

If we take this sense of the personal to be the picture that Polanyi most radically both *has* and is *in the midst of* and therefore take it to be the ground at once of his own mode of existing mindbodily in the world and of the articulation of his intellectual enterprise, in the fabric of which this sense is embedded and ubiquitously manifest, then we shall know how to construe the logic of the other images at work in his thought.

In the preface to *Personal Knowledge* Polanyi summarizes and anticipates

the thesis of his argument. He says: "[There is a] personal participation of the knower in *all* acts of understanding. But this does not make our understanding subjective. Comprehension is neither an arbitrary act nor a *passive experience*, but a *responsible act* claiming *universal validity*. Such knowing is indeed objective in the sense of *establishing contact* with a *hidden reality*; contact that is defined as the condition for *anticipating* an *indeterminate* range of yet unknown [and perhaps yet inconceivable] true implications" (*P.K.*, pp. vii–viii; I have eliminated all emphases in the original and have substituted my alternatives). On the basis of this quotation I wish to indicate the way in which the images of *obedience* and *responsibility* appear in his analysis of our feats of knowing.

I dare say that no epistemologist in our philosophic tradition has ever either explicitly claimed or implied that comprehension is either "an arbitrary act" or a "passive experience"—albeit many have no doubt allowed us by default to fall into the latter view. What makes these phrases important in Polanyi's preface is therefore the fact that he *explicitly* takes them up in order to underscore the *epistemological* meaning of the phrase 'responsible act.' Even less perhaps have any theorists in our tradition suggested that a knowledge claim had less than universal validity—however widely they may have differed as to what would qualify as such. Against those second-order accounts of knowing in our tradition in which the knower is alienated from himself as existent person, actively at the center of his own mindbodily activity of seeking and coming to know, Polanyi explicitly and repeatedly grounds the description of these processes in the *personal center of a particular self-transcending knower*—hence the adjective "personal" participation. No one would be recognized as a person who, not being centered in himself, was wholly passive, completely acquiescent to impressions from without. The fact therefore that this is said by Polanyi *even though* "it clearly goes without saying," exactly serves to enrich the context for and hence the meaning of saying that "comprehension . . . is a *responsible act*": responsible because *personal*.

More than this however, placing the expression "claiming universal validity" in this enriched context focuses our otherwise too complaisant imaginations, set before these self-evidently incontestable words, upon the fact that "universal validity" is not something *in itself*, written upon the pages of some eternal and finite text, but rather is something to which you and I have *laid claim* in *responsible acts*, each out of the self-transcending center of our personhood; hence, *personal participation*. Finally, responsible acts—indeed *any* acts—are *convivial*: their context is an interpersonal

world of others: those now long dead, those as yet unborn, and those contemporary with us, to whom we are responsive as to other persons and to whom we are therefore responsible. Knowing, then, is *obedient* and *responsible*. *Knowing* Yahweh is *hearing* and “seeing” his words and deeds, which means to obey¹—as a person before the personal. I am submitting that these metaphors for interpersonal encounter which our imaginations owe to Hebrew thought are in sharp contrast with the less than fully personal organismic and teleological categories of Greek thought: they contrast also with Polanyi’s own views in the lapses that appear in his discussions of apprenticeship as a metaphor for man’s relation to God and of the Pseudo-Dionysian search for God.

The third image is that of our fiduciary mode of being mindbodily in the world. *Fiduciary*, which plays a central role in Polanyi’s exposition, derives of course from the Latin *fidere* (to trust). Here, rather than employing the English words *trust* or *faith* which are usually used to translate the Latin *fiducia*, I shall use *to rely upon* (*rely* having a common radical with *ligament* and *religious*). This will enable me to emphasize the fact that as an existent, tonic mindbody I acritically rely upon the fact of the prereflective and unreflected givenness of my being as the ground of reflection; even as I acritically rely upon the circumambient culture and its language as the medium of reflection; and as also I rely upon those who have nurtured and taught me, thus moving me to seek to know.

The theme throughout Polanyi’s writings underscoring the (logical and necessary) reliance of all our explicit knowings upon our tacit knowings; the logical relation between the latter as ground and the former as consequent; the irreducibly from-to structure of our intentional, tonic mindbodily being in the world and therefore of our mindbodily feats of seeking, coming to know, making acknowledging affirmations of our knowings, and upholding them is *fiduciary* through and through: a *lively, intentional, active relying-upon*, whose *logical relation* to its ground is inextricably in the temporal thickness of the world. It was this sense of the ubiquity of the fiduciary structure of our mode of being mindbodily in the world that led me to claim above that as certainly as the component particulars of a motor skill do “hang together” and jointly mean that skill, they stand in logical relations with one another and with the skill as their comprehension; and that *as such an integration* this motor skill *supports*, can be the *ground* of the action that depends upon it. It is not then merely our *knowing*, insofar as we might wish to single it out for attention, which on Polanyi’s account has a fiduciary structure; our *very being in the world* is

fiduciary in structure. Our mindbodily being is fundamentally fiduciary because to be, do, or know any given thing at one moment and on one logical level we have to *rely upon* some temporally antecedent *moment* and logically antecedent *level*. We are thus *ligated* into the world.

I am not claiming that this image of “relying upon” is found only in biblical thought, even though it has there a unique sense and weight. After all, it is not without interest that for Plato *pistis monimos* (“well established belief,” *Republic* VI.505e) is sharply contrasted, in the analogy of the divided line, with *epistème* (scientific knowledge); whereas the biblical *hiphil he'min* (to believe, translated in the Septuagint as *pisteieon*) means “to say Amen to God,” “to acknowledge,” or “to obey.”² And it is St. Augustine, notwithstanding the persistence of Platonic and Neoplatonic elements in his imagination, who has underscored the equation “knowledge is acknowledgment” (*cognitio est agnitio*), thereby emphasizing the fiduciary, the *relying-upon* character of all our knowing and being—perhaps nowhere more powerfully expressed than in his words: “Who doubts that he lives, and remembers, and understands, and wills, and thinks, and knows, and judges. For indeed even if he doubts, he lives; if he doubts, he remembers why he doubts; if he doubts, he understands that he doubts; if he doubts, he knows that he does not know; if he doubts, he judges that he ought not to give his consent rashly. Whosoever therefore doubts about anything else, ought not to doubt about all these things; for if they were not, he would not be able to doubt about anything.”³ A more sweeping statement of the fiduciary structure of knowing and being can hardly be imagined. And it is this Augustine whom Polanyi embraces as a mentor.

That personal being who manifests himself as the authentic owner of his own words/deeds, to know whom is to *hear*, is also the being who *calls* each man and the world into being in the speech-act of naming them. To be a person, to have being in Yahwist theology, is to hear God’s *dabhar*, and, hearing it, to covenant with it, to *receive one’s name*—even as Yahweh (“I will be that I will be”) *gives* his. To have existence as a person is to have heard the call from God into covenant with him.

Of all the biblical images to be found in Polanyi’s account of our ways of knowing and being, none is more unambiguously or centrally present than that of “calling.” Polanyi says: “Intellectual commitment is a responsible decision. . . . It is an act of hope, striving to fulfill an obligation [can we say: to answer a vocation?] within a *personal situation* for which I am not responsible [can we say: which is *given*, even a *gift*?] and which therefore determines my calling” (*P.K.*, p. 65; emphasis added). It is in a particular

contingent place and time that one hears the vocation of Yahweh. Answering one's vocation is inherently hazardous as was that of Abraham as he left the security of life in Ur of Chaldees in search of a city without foundations. "I shall go on, therefore, to repeat my fundamental belief, in spite of the hazards involved, I am *called upon* to search for the truth and state my findings" (*P.K.*, p. 315; emphasis added).

"A sentence uttered makes a world appear." The world's existence as such depends upon a world-naming, world-calling-forth divine speech-act. Therefore who and where I am is, in this picture, the *person* I was *called* to be in the *place where* I was *called* to be. Polanyi says: "Our believing is conditioned *at its source* by our belonging" (*P.K.*, p. 322; emphasis added). "Its source" was called into being; and I have been called to take up my being at this source.

Polanyi clearly appreciates the difference between his own sense of the contingency of the existential situation in which we are each called to make responsible knowledge claims with "universal intent" and the view of critical philosophy, which so describes human knowledge as to suggest that it is free of the trammels of any contingent existential situation. "From the point of view of a critical philosophy, this fact would reduce all our convictions to the mere products of a particular location and interest [thereby *as such* to be discredited]. But I do not accept this conclusion. Believing as I do in the justification of deliberate intellectual commitments, I accept these accidents of my personal existence [the world-making words and deeds of Yahweh] as the concrete opportunities for exercising our personal responsibility (for obedience). *This acceptance is the sense of my calling*" (*P.K.*, p. 322; emphasis added).

The picture of reality fashioned on the model of a large but finite text upon which a finite number of *logoi* are inscribed, which, for purposes of this argument, I have imputed to the Greek philosophers—whatever their sectarian differences—is not the picture of a contingent and inexhaustible world, but of a necessary and exhaustible one. The model of aleatory music suggested to us what *absolute* contingency would be like but at the cost of depriving us of a conception of reality, a conception both of randomness and order and even of a conception of conception. In contrast with both of these the Yahwist picture of reality entails that every particular comprising the world is *absolutely* contingent—that is, so far as we may know, *absolutely equally liable to happen or not to happen*. At the same time however, though these words and deeds of God are radically underivable from any eternally binding *regulae*; and though the way in which these are

implicated with his identity as "I will be that I will be" is not a priori known or exhaustibly searchable; this *absolute* contingency is not that of the absolutely random, but rather is that of the *unconditioned personal act addressed to other persons, personally owned words before an other, who takes them up and covenants himself with them, thereby "making a world appear."* The contingent "uniformity of nature" in this picture is the image of God's never failing but ultimately inscrutable fidelity: a fidelity upon which we rely as we launch our inquiry into the "nature of things" amidst contingent particulars which are our data; an inscrutability that we faithfully acknowledge when "our broken bones rejoice."

Most forms of nominalism and positivism have wished to make a legitimate claim for the absolute contingency of the particulars of the world—albeit the import of such a claim has not always been recognized. As such they are partial historical outcroppings of a Yahwist theology by which our tradition has been infected. Small wonder, too, that it is partial, since, as we have seen, the central image of this theology is paradoxical in the extreme, claiming as it does that Yahweh is at once both revealed and concealed; and that to attempt to say which is which is to risk idolatry.

In very general terms, the philosophical tradition of the West has tended to be either rationalistic, believing that whatever impediments are, in practice, in the way of our grasping the fundamental structures of being, these could *at least in principle* be described and therefore should be sought; or, on the other hand, it has tended to be empiricistic-positivistic, in the sense of emphasizing the particularity and contingency of the data of our knowledge, and has therefore been skeptical of any access we might have to "fundamental structures" either rationally grasped or experientially encountered.

The thought of Kant is the historic point where rationalism and positivism are joined. Greek philosophy, but especially that of Plato, is the antecedent of the first. Hebrew thought, with its belief that the world is called out of nonexistence by Yahweh, is the antecedent of the second. It is only the conception of a contingent because created world that fully supports the doctrine of the particularity and contingency of our sense experiences. Whether or not empiricists viewed the particularities and contingency of sense experience as being tokens of a larger coherence that these tokens expressed and upon knowledge of which they bore would have to be answered case by case.

The thought of Immanuel Kant was of course decisive here. In it, the "dogmatic slumbers" of one form of rationalism having been interrupted

by the empiricism of Hume, its author tried to produce a synthesis of the two elements. Leaving aside the scholarly questions as to where Kant's thought finally came to rest—what he ultimately meant—his influence in epistemology and in metaphysics has rested heavily upon *The Critique of Pure Reason*. Whatever may have been his larger intent, the impact of his first *Critique* has been that of identifying knowledge (*Naturwissenschaft*) strictly with our dealings with the phenomenal order with a consequent discrediting of metaphysics. Positivism, in its many forms, as an emphasis upon the positivity of our transactions with the contingent particulars of experience, is a natural outcome of this construction upon the import of his thought, however unjust to Kant. And the other side of positivism, its distrust of any claims concerning a larger coherence, its agnosticism about reality (however impossible it may be in practice to sustain fidelity to such a doctrine), and its skepticism as to questions about how and whether the contingent particulars of sense experience are tokens of a larger coherence that they express and upon knowledge of which they bear, was similarly endorsed in the received view of Kant on metaphysical knowledge.

Against both those who presume, at least in principle, to be able to grasp reality entire and those who, like Ernst Mach, insist that our knowledge can be only of particulars, conveniently reported and ordered, Polanyi wants to claim that our gropings among contingencies toward a larger coherence are moved by a sense that our theories bear upon reality in as yet unspecified ways, but that the way in which the clues and theories upon which we rely are ultimately implicated with the real cannot be finally known. He was much given to saying: "Reality is *surprising!*" by which he meant that we could not imagine, even in principle, *comprehending* reality: it is inexhaustible.

Of the views of Mach, Polanyi says: "Scientific theory, according to Mach, is merely a convenient summary of experience. . . . It is the most economical adaptation of thought to facts, and just as external to the facts as a map, a timetable, or a telephone directory; indeed, this conception of scientific theory would include a timetable or a telephone directory among scientific theories. . . . Accordingly, scientific theory is denied all persuasive power that is intrinsic to itself, as theory. It must not go beyond experience by affirming anything that cannot be tested by experience" (*P.K.*, p. 9). In contrast with this view, Polanyi claims that our theories arise out of our obedient response to the contingent particulars with which the created world confronts our experience and among which we descry some form of coherence; and that these theories may have, and are thought

by those who propagate them to have, a power to disclose a reality not even imagined by their original authors. He says:

I have . . . to show, if I am to justify Copernicus that in expressing his belief in the *reality* of the heliocentric system [his belief, that is, that the system was not merely a convenient summary of sense experiences, but in some profounder sense expressed the nature of reality], as distinct from the Ptolemean, he was in fact asserting the presence of its *anticipatory powers*. . . . What he meant by asserting that the heliocentric system was real, must have included an anticipation of the fact that these features of his system [its internal coherence, its orderliness, the placing of the sun at the center of the universe, as sole provider of light] and perhaps others too, might yet serve as clues to future problems and that such problems may lead to yet unthinkable further discoveries.⁴

Copernicus believed that this theory, far from being a mere convenient summary of experience, had a bearing upon reality, therefore that, if a good theory, it potentially had predictive power and hence could generate problems for his successors that he could not even imagine—as in fact it did for Galileo, Kepler, and Newton.

What then *is* this reality for Polanyi which discloses itself to our obedient theoretical integrations at once as that upon which our theories *really* bear and as that which moves us to undertake our inquiry at all; but which nevertheless remains inexhaustible? He says: “If anything is believed to be capable of a largely indeterminate range of future manifestations it is thus believed to be *real*. A statement about nature is believed to be true if it is believed to disclose an aspect of something real in nature” (First Duke Lecture, I, p. 12; hereinafter cited as *Duke*). In all of this, though loosely so to be sure, Polanyi is against the philosophic tradition and under the sway of the paradoxical Yahwist image of a God who is at once absolutely faithful, is given to acts of self-manifestation, and yet who remains ultimately unsearchable.

Let us then conclude this long section by returning to the query with which it began. I observed that there are many words in both ordinary language and in philosophic discourse, as well as the special vocabularies of many intellectual disciplines, that are fundamental: they variously serve to state or allude to the ubiquitous, rudimentary, and obvious fact and differing forms of the connectedness of things. Among the words used to express the connectedness of one thing with another, the coherence of

many things together, or both, that I cited were 'form,' 'order,' 'whole,' 'integrity,' 'cause,' 'reason,' 'motif,' 'gestalt,' and 'meaning.' I added that while 'logic' and its cognates and 'necessary' and 'contingent' and theirs did not have the same sorts of function in our discourse, they are clearly consanguine with them. It was my conjecture that the logical force of these notions would vary as they were subject to the suasions of one picture or another: on the one hand, the picture in our imaginations abstracted by reflection into language from the phenomena of seeing and, on the other, the picture we have abstracted from the phenomena of hearing. I have also contended that the philosophic tradition, especially since Descartes, has tended, unwittingly, to be biased toward construing the meaning of the fundamental words, and especially of 'logic' and 'necessary,' in terms of the picture of vision from which temporality has been abstracted, thereby making *logical* relations and *necessary* connections atemporal.

My analysis has presented, *au fond*, one picture of seeing; three of hearing: that of hearing the Bach Prelude; that of hearing the random notes of aleatory music, as I have attempted without success to conceive it, and that of hearing a lively speech-act. In the first we saw that all the particulars were simultaneously and sensuously co-present in a dead slice of (visual) space which is eternal. There were no difficulties in using 'form,' 'order,' 'whole,' 'integrity,' 'reason,' 'meaning' (though grossly impoverished), or 'gestalt' subject to the governance of the visual picture, but neither was there any necessity thus to limit their use. 'Cause' and 'motif' construed in terms of the visual picture, gave difficulties, since temporality seemed a necessary condition for their appearance, a condition not satisfied by the slice of dead (visual) space. The conception of 'necessity' when compared with 'contingency' has, in the tradition, by and large, been subject to the visual picture. By contrast the visual picture affords no place for a conception of 'contingency.'

The analysis of the Bach Prelude as a model of hearing disclosed not only that the fundamental words may comport happily and with greatly enriched meanings with the picture of hearing; but, rather surprisingly, that the particulars of the Prelude may be heard as relative contingencies at the same time that they may be grasped as necessary, either as the particulars of the musical resolution *when it has been heard* or as the eight-tone scale in C major to which the constituent notes are subject. Aleatory music was depicted as a limiting case to highlight the import of the others. All of its "particulars"⁵ being random hence *absolutely* contingent (even if they were conceivable as such in themselves) could have no relation to one

another, each being absolutely underivable; and therefore they could yield no sense of order, hence no sense of necessity *in any sense*.

The use of the lively speech-act as a model enables us to educe a conception of *absolute* contingency from my act of owning my own words before you, this being neither random nor only *relatively* contingent, even while being subject to the suasion of the motives of grammatical, syntactical, and semantical rules that native speakers of our language are given in practice to following and finally to what it is we intend to say—all of which each of us takes up into himself as the center of every act of speaking.

IX

Early in these meditations the expression 'metaphorical intentionalities' appears, its sense bearing much of the weight of the argument. Some care must now be given to an exegesis of its meaning. Many of the premises upon which my use of it has depended have now begun to be set forth. Even so, once again we must go back in order to go forward.

My mode of being mindbodily in the world is radically and irreducibly intentional. In saying that it is *irreducibly* intentional I mean that any account of my mode of being in the world with pretensions to completeness which denies or overlooks the *givenness* of the from-to, proximal-distal, protensive temper of my being is insufficiently complex accurately to portray this integral modality. Tension and intentionality are the radix of being mindbodily in the world.¹

Let us then look at the etymology of 'tension' and 'intentional.' The Greek *etumon*, whence the word 'etymology' itself, means the true or literal sense of a word that is established by reference to its origins. This suggests that any given sense or use of a word is bonded intentionally to its true, i.e., literal,² original sense, no matter how *attenuated*, *tenuous*, therefore stretched out, hence *thin* (all of which words themselves have a common radical with 'intentional') that bond may have become.³

The radical of 'intentional' and 'tension' appears in its simplest form in English as the word 'tend.'⁴ The Indo-European roots are *ten-*, with variations in vowel, e.g., *tan-*, *tein-*, *ton-*, *tun-*, *d* being sometimes substituted for the *t*. The meaning of the root is "to stretch." The Greek cognate, *teino*, means "to stretch" (by main force), "to stretch to the uttermost."

From the Latin *tendere* derive such words as 'tendency,' 'tendential,' 'tender' (as in "an offer": "He tendered [that is, stretched forth] his resignation," or as in "delicate" [by reason of growing], i.e., "stretching

forth"). From *tendere*, *tendo*, *tendonem* derive 'tendon,' 'tendinous'; from *tendere*, *tensus*, with a variation, *tentus*, we get 'tense' and 'tensile' as well as, from *tentus*, *tenta*, the word 'tent,' i.e., a portable shelter that becomes functional when one stretches it, and 'tenterhook,' i.e., hooks for stretching (animal skins) for making a 'tent,' whence "to be on tenterhooks," that is, to feel stretched, tense. From the Latin *tendere* we get the following compounds, to mention but a few in order to give some sense of the breadth over which *tendere* stretches and to indicate, too, how English has stretched it: from *attendere* (to stretch toward) come 'to pay attention,' 'to attend,' hence 'attendant' and 'attentive'; then 'contend,' to stretch oneself with all one's strength; 'distend,' to stretch apart; 'extend,' to stretch out or to stretch to the full; and 'intend,' to stretch into or towards, be directed at, to have the purpose or pretension of.

The word 'intentionality' derives from the Latin *intentionalitas*, meaning: the quality or fact of being intentional, being directed at, having the pretension of. Among the other compounds and simples deriving from the Indo-European *ten-* are: 'ostend,' 'portend,' 'pretend,' 'protend,' 'superintend,' 'thin,' 'tenuous,' 'attenuate,' 'extenuate,' 'tendrill,' 'tetanus,' 'hypotenuse,' and 'tone.'

Before we examine the etymology of the word 'metaphor,' we should *attend*—that is, stretch ourselves toward—the nature of the relation that held for us among the non-English radicals, the English simples and compounds, and their cognates as I wrote and you just read the words immediately above, beginning with "the radical of 'intentional' and 'tension'. . . ." Has not this process *distended* our imaginations, that is, stretched them apart; extended, that is, stretched to the full; intended, that is, directed toward new plexuses of meaning by these dynamic juxtapositions? And did we spontaneously suppose the relations among the cognate words lying on the page to be merely spatial; or, reflecting upon it, did we rather take their relations to be *intentional*, in short, "stretching out toward" and meaning one another? Indeed, is not the fact of their doing this the very condition of their being words for us, rather than, say, mere physical marks? And if this "phenomenon" is indeed bedrock, then *could* we have access in reflection to anything more irreducible?—even though admittedly the "phenomenon" comes to have a nature *as phenomenon*, that is, as *now reflected*, which is determined by the concepts through the medium of which it is reflected, and these *can* be still further reduced.

But then if we do spontaneously believe this "phenomenon" to be bedrock, do we not nevertheless find ourselves being tempted skeptically

to conclude that, after all, intentional relations do not exist among these "words" (whatever words may be) upon the page, but only in our minds; to believe that these intentions and intentional bonds are "merely subjective," not realities in the world?

Yet as we have perhaps seen, these very material marks—*words*, we acritically take them to be—are the vehicles by which intentionality makes its appearance in the world; they are the vectors of its incarnation.

Is it your sense, then, as you read, that it is only *as if* these pretensive, ostensive, and protensive bonds hold among the words on the page above; or is it rather your sense that intentionality is actually situated *here*, if indeed anywhere, as a *tertium quid* beyond the distinction between subjectivity and objectivity, inextricably interwoven with the plexus of tendrils sinewing together all these things and more: the page before you, with its physical surface bearing its physical marks but now integrated by these lines of intentionality into this *tertium quid*; the mutually bonding words, *necessarily* bound to these physical marks, but now integrated to language, so that the physical marks no longer exist in *themselves* as marks; and, finally, you, *to all of these equally*, yourself, integrally being mindbodily in your ambience.

I am claiming that this nexus of intentional threads remains an irreducible phenomenon in the world, *just as real as anything can be*. It only begins to fall apart and disappear when we *reduce* it in reflection into its constituent particulars through the medium of opposing concepts such as 'real-ideal,' 'objective-subjective,' 'out-there-in-here,' 'mind-independent-mind-dependent,' and the like.

In saying this I am, of course, not at all arraigning reflection as such. I am rather calling attention to what reflection is, what it does, and what some of the consequences are of its unnoticed hypertrophy in the picture that is a motif of our modern Western acts of reflection. In particular I want to suggest, in spite of the irony that portions of these very reflections of mine exhibit this excess, how, left to what appears to be its natural momentum, reflection "sunders us from ourselves."⁵ It races past its own intentionality. It systematically overlooks omni-apparent intentionality by failing to catch it "reflexively," "out of the corner of its eye."

So much for the moment then, for the uses of the word 'intentionalities' in the phrase 'metaphorical intentionalities.' What now of 'metaphor' and 'metaphorical'?

The literature on the subject of metaphor is staggering in its richness. Literary critics and philosophers, to mention only them, have examined

in great detail what metaphors are, what they do, and how they do it.

A canvass and criticism of this body of writing is fortunately not called for here. In the setting of this meditation what metaphors are said by these writers to be and do has little bearing. My use of the word is importantly different from those uses that are generally under analysis among them.

In fact the phrase 'metaphorical intentionalities' came to mind quite unbidden as I was trying to express the way in which the author of *Personal Knowledge* may be seen in its text at once both to *have* and to be *in the midst* of a picture. This fact had struck me as important, since to describe and interpret it, it seems, is to disclose certain curious features of anyone's relation to his own written and spoken words. If in speaking and writing, I find myself *in virtue of the very fact of speaking and writing* at once both to *have* and to be *in the midst of* a picture, then my *knowledge* of where and how I am and my *being* where and how I am are *radically* connected. And this connection I found striking: this root-bond of language with what, *radically*, language is about, which my reflection cannot decompose (even though *in reflection* I am easily given to supposing I can), since reflection's flexibility here meets its limit; this radix from which extend the radials of all the derived protensions of my various less or more abstract systems of notation; this unanalyzable omphalos of my knowing/being, which nevertheless I am now powerless to remark; this natal educement of the instruments of reflection from my mindbodily being in the world; this, I felt, needed, if possible, to be disclosed. And, I thought, the metaphorical intentionalities of the *very reflective instruments in use above*, by means of which the disclosure itself was accomplished, also needed to be noticed in the ethos of our ubiquitous Cartesianism.

There are at least two misconstructions that a reader might place upon what I have said here. First, he might suppose that in driving reflection back upon itself in this tortured language, to the point at which it meets the limits of its own flexibility, to discover that *knowing* where and how I am and *being* where and how I am are radically connected and complementary, I somehow minify the significance of our powers of reflection and of the fact that by reflection we can distance ourselves from our roots and from reflection's roots, thereby to come to distinguish knowing from being. Not so. The object of my polemic is the *picture* of deracinate reflection that holds us captive. If our reflection distinguishes between knowing and being *and then sublimizes itself*, we shall in our second-order accounts indeed be sundered from ourselves. Second, the reader may take the involute language of this passage to suggest that what is at bottom real for me is an

isolate ego, that my view is some form of Cartesianism or solipsism, perhaps. Again, not so. All the familiar things of our mutual form of life are here: you, I, all those others, going about our familiar activities in the natural and social world and finding very little of it in the least “philosophically” problematic. But it is necessary and more than a little embarrassing to say that all of this is not just hanging up there in “ontological” thin air, a view that we are tacitly seduced into holding by the Cartesian picture by which we are immured.

When I first claimed as my own the unbidden phrase, ‘metaphorical intentionalities,’ it must have been *assumed* in the depths of my mindbody, I take it, that this picture that I at once both *have* and *am in the midst of* I *had* and *dwelt* in through the medium of my spoken and written words; that the picture had a certain bent, a particular tendency, a disposition; that a fortiori alternative pictures could be imagined and that this bent or tendency of both my picture and that of alternatives to it would be a function of the intentionality, yes, the logic of the words, in the matrices of their intentional bonds, by which the picture was composed.

As I now revisit this unbidden phrase it seems to me that the logic that governs the appearance in the phrase of the word ‘metaphorical’ has to do with expressing the *particularity* of the bent, the tendency, disposition, intentionality, and “logic” of a given picture. Evidently it was by means of the word ‘metaphorical’ juxtaposed to ‘intentionality’ that I wished to show how, among several pictures, all of which are equally, indeed necessarily, intentional, the particular intentionality, penchant, leaning of one such could be distinguished from that of others. By what shapes, what figures, what vectors of connectedness; by what protensions, what liens, what rhythms was my imagination led to make this juxtaposition?

Well of course I cannot say. Certainly I cannot exhaustively say. Here, once more, the flexibility of my reflection meets its limits. But yet again let me trust my imagination to resonate with the tacit logic of my native language, with the metaphorical intentionalities embodied in its etymology; let me journey to this *urworld*, beyond which for reflection there lies only darkness.

The word ‘metaphor’ is compounded of the Greek verb *pherein* (to transfer or to carry) and the prepositional prefix *meta-* (after, over, beyond, behind). *Metapherein* then means “to carry over,” “to carry beyond,” “to transfer.”

In the very act of writing down the above words I have a presentiment that my mindbody is in effect moving and dwelling virtually in the virtual

efforts evoked in it by the lines of tension appearing in the world *by reason of this very juxtaposition of words*; evoked, in fact, by the metaphors embodied in the etymology of 'metaphor.' In the etymology of 'metaphor' there are metaphors for intentionality: to transfer, to carry over or beyond, that is, to stretch toward, as when I pick something up, *contending* (i.e., stretching myself with all my strength) against earth's gravity with every step and carrying it along a certain course from *here* to *there*—intentionality arcing between the words 'here' and 'there' as you read them, arcing as well between *here* and *there* to which the words refer, between which, in effect, I move.

Now what does the *O.E.D.* tell us about metaphor? It says: "*Metaphor*. The figure of speech in which a name or descriptive term is transferred to some object to which it is not properly applicable." But what does this mean? What is a 'figure of speech'?⁶ Is the form of words 'figure of speech' *itself* a figure of speech?

If I answer yes to this, then I seem condemned to an infinite regress. If, that is, I cannot translate the words 'figure of speech' into a locution that is not itself taken to be a figure of speech; if in other words there is, relative to the logic of a given discourse, no *bedrock locution* from which the figure is derived and in which it is grounded, the whole of language collapses for want of assertorial force. No knot has been tied in the thread of language.

The same case can be put differently. If the expression 'figure of speech' could *only* function as a figure of speech, it could not provide me with the logical "base" upon which I might rely in order to move from my critical posture vis-à-vis the word 'metaphor' in order to dwell acritically in its now established meaning/use in virtue of which it acquires its assertorial force. Otherwise I could never *use* the word 'metaphor' to transact any real business in the world of the oral-aural reciprocity.

I want therefore to say that the words 'figure of speech' are *not* a figure of speech⁷ *as they appear in the definition of metaphor printed in the pages of the O.E.D.* The words 'figure of speech' in that context are usually taken to be logically primitive relative to the word 'metaphor.' The *O.E.D.* "takes its stand" *acritically*, hence assertorially, in the words 'figure of speech' in order to give the uses of the word 'metaphor' with which, in the context and logic of this lexicographical entry, it is dealing *critically*. In this context, according to the logic of this linguistic setting, *which includes the logic of my being in the world with these words*, the way in which I stand to them mindbodily, the locution 'figure of speech' *as used* is not derived but bedrock. For I am taking my stand and dwelling acritically in them. And

this would be even more obviously so with the words I might actually speak *addressed to your hearing*. *They* would be *paradigmatically* bedrock.

But how then is it possible to claim as I have that the *O.E.D.* “takes a stand”? Well, I want to say: because when I read the *O.E.D.* (and there can be no critical reading of a text, if there is not first an acritical reading of it, a tacit appropriation and endorsement of mere printed marks as meaningful words), I take my stand in the words ‘figure of speech’ virtually, that is, in effect, even as you are taking your stand virtually, in the very words you are just now in the act of reading from this page, dwelling in them acritically, as you comprehend them. And as you do this, you are also dwelling acritically in your own mindbody in the world: itself the ground of your acritical dwelling in the words, as also of your subsequent critical dwelling in them.

The bedrock meaning of a form of words then is given in and by the “logic” of a particular convivial setting of intentional speech-acts. We attend *from* any such given setting to whatever it is we are speaking of, even as we stand “in” our erect bodies which then will support our heads in order that we may look about. Sometimes what we speak of with words is other words. As we have begun to see, the “logic” of the former is unassimilable to that of the latter. The “figure of speech” that is logical bedrock is not itself a figure of speech. The logic of the words that we use to speak of other words is heterogeneous with that of the other words. The relations of their logics are hierarchical. One might suppose that there are as many such hierarchies of logics as there are conceivable speech situations. But this conceivable infinite regress is brought to an end *every time I take my stand* in an actual speech-act within *a given logic*. Thus do I tie an assertorial knot in language. And indeed in every speech-act there is given the “experiential” ground and paradigm by which I conceive the distinction between human actuality and mere human possibility—which is to say between the concepts ‘actuality’ and ‘possibility’ as such.

The plastic material from which is derived and in which is grounded the indeterminate hierarchy of such logics is then our as yet unreflected mindbodily being. It seems that meaning in any given sense presupposes meaning in some prior sense until we come to ground at last in the as yet unarticulated tonality of our being (alive) in the world. Any form of words is at bedrock a *figuring*, that is, a fingering, modelling, molding, shaping, upon the plasticity of our mindbodies in the world.

How is it then that ‘metaphor’ and ‘metaphorical’ in the unbidden phrase ‘metaphorical intentionalities’ perform the function I have claimed

for them: namely, expressing the fact that the words we use and in the dynamic juxtapositions of words we make both *shape* and *bear* the particularities of the bent, tendency, penchant, and disposition of a given picture such as we all at once both *have* and are *in the midst of* as we speak and listen, write and read, or even just puzzle in solitude?

Let me go back to the very words 'figure of speech' now to regard them critically as themselves making a figure of speech, a metaphor. Notice the words 'figure of speech.' Try to imagine yourself coming upon this juxtaposition of words in the text relatively detached from all the words that precede it, as well as from your own familiarity with it. Do not the words thus deployed set up within your mindbody right here and now, before or with these words in its ambience, a very particular tension that did not exist there before? Does not this *tension* have a *tendency*, a bent, a direction, a disposition? Further was there not a certain tension between the form 'figure of speech' and the form figure of speech—between the words in single quotation marks and the same words without them? Was there not in the relation between your existent mindbody and the phrase 'figure of speech' an equivocality that does not obtain between it and the phrase figure of speech? Finally was there not a similar tension with a very particular bent, tendency, and disposition holding between the locution "figure of speech," used in the definition of 'metaphor' in the *O.E.D.*, and the plastic material—you, mindbodily in the world with your own language—upon which these words were a figuring? Now, I want to claim that metaphors induce in us and are the vectors of such particular tensions and tonalities of our various modes of being mindbodily in the world.

To be sure this is an unconventional and in fact radical claim about the nature of metaphor, since I am claiming that the root metaphors for 'metaphor' are buried in the etymology of our language. Figures derive from a figuring upon the plasticity of our mindbodily being in the world with our language. But this view also clearly implies that metaphors lie deeper even than speech and that their figuring power resides in the dynamic juxtaposition for our mindbodies of two or more in some way opposing visible shapes and colors, audible tones, touchable textures, and the like between which for us there is an irreducible tension. It follows of course that there are metaphorical intentionalities, in the sense I have undertaken to elucidate, expressed in and through architecture, music, the plan of cities, social and natural rhythms, etc. It implies, too, that such juxtapositions are vectors and shapers of our mindbodily being in the world.

Indeed it is not outlandish to think of my mindbody itself as being

through and through metaphorically intentional: insofar as I am alive and persist in being from moment to moment, continuously integrating the particulars of my mindbody to its totality in accord with its own inherent "logic," my beating heart, not as pumping blood through my vascular system, but *in its very beat*, the beating itself altogether worldly, palpable, yet intimate, a dynamic, intentional, *from-to*, temporal gestalt—metaphor, in my sense—bearing me forward in the world in and upon its very particular and changing rhythms. Except that here at last we reach the bedrock where we can no longer tell what it is that *bears* from what is *borne*, nor tell the dancer from the dance.

In *this* sense metaphors (*metaphoros*, *metapherein*) carry us *over*, *through*, *beyond*. It is they that *entone* our existence. They are tonic. They are the vectors of the intentionality and tone of our mindbodily being.

Joseph Church,⁸ using the notion of *schema*, a very rough analogue of my "picture," as that by means of which an infant's experience is consolidated preverbally as knowledge, argues along lines congenial to my view. He says: "The most fundamental form of knowledge is the *schema*. . . . Stated logically rather than psychologically, a schema is an implicit principle by which to organize experience." He then elaborates: "It is obvious that schemata can be very general or very specific. Most generally, all our activity assumes orientation to a very broad spatial and temporal and situational framework. This orientation, which might be termed our sense of identity, is embodied in a mobilization that can be thought of as our basic consciousness." He then goes on to observe that basic consciousness is so "stubbornly ingrained and pervasive" that, because it is a mobilization, we sometimes cannot get to sleep—demobilize ourselves—without the help of drugs, and yet a permanent loss of this basic consciousness would result in insanity (or imbecility).

Our specific schemata, subsidiary to general patterns of orientation "which we might call attitudes," appear in "both the valuative coloring of the environment and in the way we carry ourselves, in our personal style."⁹ How does the fact of the operation of these schemata show itself in ordinary experience? Church illustrates: "When, climbing a staircase in the dark, we put our foot on the final step and come jolting down through empty air, we realize that we have been steering ourselves by a schema."¹⁰ And again: "We feel shaken and disoriented when we discover that it is Thursday, whereas we have been acting all day as though it were Friday." And again: "Our awareness of the strange, the odd, the incongruous, the incredible, the impossible, stems from a lack of fit between phenomenon



and schema.”¹¹ And finally: “It follows too, that logical implication is a product of the schematic structure of a proposition.”

Let me illustrate my view by using two very simple prelingual or extralingual metaphors, one visual and one audial. Consider the following juxtaposition of two visual figures.¹²

I invite you first to attend to figure A. Do not be in haste. Permit yourself the leisure to dwell mindbodily in the opposition between the shape of the square and the shape of the circle that it encloses. Now by attending from the figure as a whole to the enclosed circle dwell in its stasis. Finally, by attending again to figure A as a whole, allow yourself to dwell mindbodily in the harmony, balance, and stasis obtaining between the circle and enclosing square. Do you find yourself dwelling in the world in a subtly different way at each of these stages? If so, is not that subtle difference a function of the bent, tendency, and disposition of the figure, differently addressed to your mindbody at each stage according to the different nature of your attention in the two cases?

If you have found that the answers to these questions are, on the whole, yes, then it should become even more obviously so when you perform the same exercises with figure B; albeit where in A your attention was held by stasis, harmony, and repose, in B it is held by an imbalance between the circle and the enclosing square that is dynamic. This is also true when you take in both figures A and B at once; dwelling in the tension of their dynamic juxtaposition upon the page above. I suggest that you experience a *particular* tension (we should now say, intentionality) rather than some other possible ones *because of these particular figures*. These particular juxtapositions are at once the terminus a quo and the terminus ad quem of the intentionality—quite narrow in its range, to be sure—of your mindbodily being in the world, if we were to imagine the world to be exhausted in these figures.

Now let us consider an extralingual sonic metaphor. If I strike middle c

on the piano and the C just above it, I shall have juxtaposed two tones that as they appear in the world for my resonant and ductile mindbody, will be, again, at once the terminus a quo and the terminus ad quem of a narrow, perhaps barely noticeable, but very particular intention, a specific tonality for my mindbody. If I strike C and F successively, there will then appear a new sonic metaphor in the world to educe and bear a differently shaped intention to impart to me and therefore evoke from me a different *entonation*. And if I strike C and F simultaneously, as a chord, followed then by the chord C and E, there will exist in the world with me a relatively far richer and more complex eliciter of and medium for my intentions.

As the whole of visual art and the whole of music are pregnant with quite innumerable but very particular metaphors for implicating my intentions with the world, so also is our language. It is in and by means of these metaphors that I have my particular mindbodily mode of being. This is what it means to *have* and be *in the midst of* a culture.

By means of the locution, 'metaphorical intentionalities,' we express and mediate this unreflected but ubiquitous entonation of our mindbodily being in the world.

These intentions, *these* juxtapositions incline my being in a particular way, dispose me in a particular direction, even as does also the integration of all of these to a larger coherence, namely, the picture that I both *have* and *am in the midst of*. It is true: meaning is radical, irreducible, ubiquitous; older than our reflection. Our tonic, entoned mindbodies, resonating with these metaphorical intentionalities, bring meaning forth.

X

Since I have preempted the use of the words ‘metaphor’ and ‘metaphorical’ to serve my own unconventional ends, some comment upon their more familiar uses seems called for at this juncture.

I have used these words in such a way as to legitimize their application not merely to “figures of speech” as we use this expression in “ordinary” language, but over a wide range of unusual other cases: cases like the dynamic juxtaposition for our mindbodies of two or more in some way opposing visible shapes and colors, audible tones, and touchable textures. I have even suggested that there are metaphorical intentionalities—that is, dynamic juxtapositions for our mindbodies—expressed in and through architecture, music, the plan of cities, social and natural rhythms. And if I profess to find metaphorical intentionalities, that is, dynamic juxtapositions, at once shaping and bearing our mindbodies in cases as diverse as our ordinary language at one end and the natural rhythms of our hearts at the other, it may legitimately be wondered what has become of ‘metaphor’ and ‘metaphorical’ in the received sense; and furthermore whether I would wish to claim that even abstract notational systems such as mathematics and logic—whether of the Aristotelian or the Whitehead-Russellian sort—also may express and embody the dynamic juxtapositions that shape and bear the tonus of our mindbodily being in the world.

I shall in due course wish emphatically to make this last claim. But first let us animadvert upon ‘metaphor’ in what I take to be its more familiar sense.

In general, philosophers and literary critics—as even, indeed, all of us in ordinary conversation—when they wish to consider the nature and role of metaphors and figures of speech in language, oppose them to what they take to be the literal. Many times in ordinary conversation when we use the

word 'literal' in an expression such as, say, "He was literally beside himself," it is not evident on its face whether we mean what we've said or, if we do, *what* it is we mean.

Surely we don't mean, "He was beside himself in just the very way in which he was beside his friend Weismann and his trusty dog Myk." Yet, if we are not asserting this (putatively *literal*) state of affairs, but rather something thought, on its face, to be "metaphorical" in relation to it, it is not at all clear why we should feel compelled to suppose that the expression 'He was beside himself' (i.e., "out of his mind," "frantic," "overwhelmed," "quite mad," etc.) has not in fact been *literally* used, that the language is not as direct as can be.

Very often I think we use 'literally' to mean the same thing as 'emphatically,' 'actually,' 'really'—not, in other words, to draw a distinction between the putatively literal and figurative uses of language, but to signal the assertorial weight we wish our utterance to be taken as having. If I say, "He was literally at the end of his rope," I do not mean nor am I usually taken to mean, "He was hanging from a strand of twisted hemp." I believe I am usually taken to mean, "He was really in extremis," or some such. Both the equivocations that can be made to appear in so ordinary and simple a case as this one and the fact that we often use 'literally' to add assertorial force and weight to our words as when we seem to mean by it something like 'emphatically,' 'actually,' or 'really' should arouse in us suspicion of the neat and fixed distinctions between the uses of 'metaphor' and 'figure of speech' and their cognates, on one hand, and those of 'literal' and its cognates on the other, which often bear so much freight for philosophers and critics, eager thereby to score some epistemological point or fix some epistemological boundary.

Before proceeding it is well to remind ourselves of an earlier discovery: that the Greek word *etymon*, whence the English 'etymology,' means the true or "literal" (do we wish to add "emphatic," "actual," "real"?) sense of a word that is established by reference to its origins. From this disclosure above I drew the inference that any given sense or use of a word is intentionally bonded to its true (which etymologically speaking is to say, its literal, original) sense, no matter how attenuated hence tenuous, stretched out, and thin that bond may in a given context be felt to be.

Often, perhaps usually, certain assumptions about what language is and does are determinative of the way in which 'metaphorical' and 'literal' are sorted out. I want to explore one of these and to call it into question on my way towards offering not so much an alternative assumption as a different ✓

angle of vision upon what language is and does. If my first premise is true, then this new angle of vision will incline us to sort out 'metaphorical' and 'literal,' not greatly so, but somewhat, differently; yet differently in such a way as perhaps crucially to alter our angle of vision upon many "ontological" and "epistemological" issues.

The tacitly held assumption that I wish to make explicit and to challenge is that of what I shall call *language realism*, or the "large but finite text theory" of the way that the meaning of our language is authorized and secured. Language realism, paradigmatically illustrated in Platonism and Aristotelianism, but by no means confined to such explicit and radical forms of it, is the view that reality is both more or less adequately embodied in and paradigmatically expressed through a certain privileged language; that the logical grammar of this privileged language is both clear and fixed—something to which one can appeal from the allegedly more opaque and looser norms governing the casual speech practices among members of a given speech community; and that its privilege is forced upon us by the very authority of what is taken to be reality itself—a large but finite text.

This view I think is quite natural to us; one almost wants to say inevitable. We fall into it because we have all been able to learn our language at all only by acritically and confidently indwelling it amidst the intentional plexuses of our form of life: the linguistic conventions set within their extralinguistic matrix, these in turn set within the convivial order of persons dwelling mind-bodily together with us in a common world. However rich may be the grammatical and syntactical complexity of our language such that there can be to the making of simple assertions in the indicative mood, active voice, many alternative moves in it (for example, the subjunctive, imperative, interrogative, optative moods; the active and passive voices; transitive and intransitive verbs; many tenses, etc.)—however rich the complexity of our language, I say, the indicative mood is radical, *insofar as we dwell in this form of life assertorically*, taking our speech-acts as *transacting real business*, bearing upon something other than themselves. The indicative mood is a reflection in the reflected modalities of language of a fact itself anterior to reflection: namely, the fact that my relation to my own mindbody, *insofar as I dwell in it*—even if equivocally—in order to attend *from* it to all else in the world, must itself in some measure be in the "indicative mood."

Why then is the doctrine of language realism a natural and ever present temptation? Each of us came precipitately into the world and after some time found it to have been a going concern. To the genesis of this world, especially to the development of our native language, which all around we

begin to hear being spoken, we had upon our arrival made no contribution. Language is already here, as *la langue*,¹ an institution: ancient and formidable, an instrument of great power.

There is just no denying that this is an incorrigible feature of the history of the personal relations that each of us has had to his native language. If our reflections upon language, its relation to reality, and our relation to both of them are governed predominantly by a picture derived from and formed upon *this* experience of our relation to it, we shall tend to conceive it as a kind of “heteronomy” to which we are subject. We shall, in short, tend to be language realists, believing in other words that, however freely we may figure with language “in fancy,” there is after all a bedrock *logos* clearly and fixedly distinguished from *mythos* whose sanction derives precisely from its status as the privileged medium of reality—from being the content of a very large, finite, and definitive text.

In saying so much I do not wish to be taken as suggesting that the notion of ‘privileged language’ could have no licit use, albeit, if my challenge to language realism proves to be plausible, it will have a now different use. Later I shall claim more fully that “privilege” is not simply given in the “nature of things”—as I might be tempted to suppose, tracing the logic of the above narrative account of but one version of the history of my relation to my language, a version in which it did indeed appear to have been handed down to me from on high. Rather this privilege is “conferred” by ourselves as speakers, as we, learning language, acritically dwelling in it, taking up the at-hand tokens within the complex logico-grammatical nexuses of our language (*la langue*), and in speech-acts (*la parole*) convivially judging the appropriateness of *what* we say to that reality about which we take ourselves to be saying it—though I do not at all imagine in saying *this* that our feats of “judging” this appropriateness are explicit and lucid acts. On the contrary. Nor, furthermore, do I suppose otherwise than that we have reason to be grateful for the fact—if also suspicious of it—that sheer habits of speech-practice in certain regions of speech free us to innovate with novel utterances in others. What we must not forget, however, in all our attention to the given palpability of *la langue* is the fact that for each of us every speech habit upon which we *now* rely was for us first at least a *tokenly novel* speech-act.²

The reality that makes its appearance for us within our convivial acts of speech disciplines these acts and constrains them with itself. If this formulation strikes you as being hopelessly loose in the way in which it attempts to express the relation between language and what language is about—

between language and reality—this is because I am trying to avoid the seductions of language realism; indeed I believe that relation to be looser, less fixed than we are given to supposing when we are in thrall to the gravitational pull and reductions of language realism.

But now there is another picture of my relation to language already portended in what has just been said, whose logic will direct my reflections upon it along a very different course.

If I attend particularly to my own mindbody within its convivial setting among other speakers of our native language, one of the things I shall notice is the extent to which I am myself at the center of my own speech-acts—however equivocally and indeterminately so. And as this is so, even though I am subject to the grammatical, syntactical, and semantical norms-in-practice of speakers of that language, I am, *as speaking*, always actively (though usually not lucidly) in the midst of my own imaginative figuring with the at-hand resources of *la langue*, as I lay claim to them to form what will in every case be for me at least a tokenly novel utterance. And it is *this very speech-act*, in all its existential particularity, in its own particular medium taken up by my auditors, by means of which what was, before its full consolidation, a free-figuring with the resources of our language, *becomes* what I “literally” mean and my auditors *take me* “literally” to mean—*when* I am saying and others *take me to be saying* what I believe *to be the case*. In this convivial act I and my auditors have mutually instituted, *on this occasion*, the assertorial force and logic that shape these acts of speech, though, since this is disciplined by our form of life, it is not arbitrary. The ubiquitous and well-founded sense we have of the “givenness” of *la langue* and also the unproblematic and routine character that these acts have come to have for us by the time we have come to reflect upon them may cause us to overlook the fact that it is *we*, you and I, moving out of our mindbodily integrity, who interpersonally and convivially *shape* and *form* out of the inherited materials at hand and, in speaking and hearing, endorse and *uphold* the meaning, sense, and “grammar” of our utterances. And this is *always* so, even when what you say to me, you have said in writing, what I hear from you is what I read, and neither of us is personally known to the other. In the actual speech-act in which I own my words before you and in which you covenant yourself with them, an *absolute* is constituted. As we jointly institute the assertorial force and logic of our mutual language in the setting of the lively oral-aural reciprocity—mutually upholding the world that in our speaking we have made—a *ground* is established upon which, *while this continues* so, no relativizing skepticism can get a foothold.

We can no more be alienated from our words at the same time that we in good faith dwell assertorically in them than we can be alienated from our mindbodies at the same time that we are alive, sentient, motile, and oriented in the world through them. Relativism founders upon the rock of the concrete convivial acts of our lively, tonic mindbodies.

Almost certainly, unless you are more immune to the drag of language realism than I, you will, upon reading these words, feel some angst over what appears to be the precarious status among us of the meaning of our speech, even the meaning of the "literal" in it, by the introduction of these notes of contingency. But if you do, as I do, this is only because of the fugitive superordination in your imagination of a certain set of expectations borne by a single picture. At such a moment the anxious query of Wittgenstein's interlocutor becomes mine: "'So you are saying that human agreement decides what is true and what is false?'" And I am somewhat consoled by Wittgenstein's reply: "It is what human beings *say* that is true and false; and they agree in the *language* they use. That is not agreement in opinions but in form of life."³

What then will be disclosed to our reflections upon language, its relation to reality, and our relation to them, when they are governed predominantly by a picture derived from this equally incorrigible feature of the history of our personal relation to language, is a sense of our relative "autonomy" in relation to it.

But this useful distinction between two pictures of our relation to language, taken now as at once both *la langue* and *la parole*, one of which highlights the elements of apparent heteronomy in it, the other of which highlights the elements of apparent autonomy in it, must not be allowed to become a dichotomy. For in fact if we put the two pictures together to form a third, stereoscopic image, we shall see about the status of language what we will not notice in either of the two alone: that our finite freedom is paradigmatically disclosed through our power to speak *as our own* and to comprehend *as our own* meaningful novelties. Surely this is part of what Merleau-Ponty means by saying, "Language becomes something mysterious since it is neither a self nor a thing. . . . [It] is neither thing nor mind, but is immanent and transcendent at the same time."⁴ Spirit (*la parole*) and letter (*la langue*) are at once indissolubly bonded and irreducibly oppugnant; this amphibological and unstable formula is what we are at once required and find difficult to keep in mind in this analysis.

We have seen that there can be only a metaphorical hence no literal meaning of the word 'literal,' since, to be etymologically strict, a literal

meaning would be “taken by the letters.” But l.i.t.e.r.a.l. are not a word. If then I were to wish to say, “He was literally at the end of his rope,” and mean and you took me to mean, “He was hanging by a strand of twisted hemp,” this would occur only because you and I have tacitly agreed to take ‘literally’ *metaphorically*, that is, to take the mere letters, l.i.t.e.r.a.l., as a word. If we are to hold fast to our formula that spirit and letter are at once indissolubly bonded and irreducibly oppugnant, and at the same time are to appreciate that large epistemological and ontological “decisions” hang upon our doing so, we must hold fast even when, as in the above example, the blinding self-evidence of the case might lead us—children of the Enlightenment that we are—to suppose that the formula, since *obviously* true, cannot *therefore* possibly be philosophically important.

Yet even taking ‘literal’ by the letters, is of course not to reach some kind of ontological bedrock. Without those tacit acts whereby, as I voice aloud l.i.t.e.r.a.l., you and I mutually construe these audible sounds as letters and not as mere noise; or, as I write down on paper l.i.t.e.r.a.l. within your full view, you and I mutually construe the marks I make and the marks you see as letters rather than as mere black figures on a white ground, there are strictly no letters in the world just then in being between us. Language realism—like all realisms—has a picture in which we are given a definitive *text* whose words appear there independent of our convivial mindbodily tonicity in the world, requiring only to be read—where it is forgotten that reading is itself, after all, for all of its routine and commonplace character, a complex, intentional, exegetical feat, absolutely every time it is performed. Language realism—like all realisms—is wont to point us to some ontological bedrock for which we may abdicate responsibility, as its picture has it, since reality is not depicted as having been convivially instituted by us, with universal intent—even while as we did so reality disciplined and constrained us with itself. Therefore realism tends to be crypto-reductionistic. Whereas, as we see, spirit and letter are at once indissolubly bonded and irreducibly oppugnant.

Before proceeding to the question of the peculiar status, if any, of formal logic and mathematics as perhaps special languages, special in the sense of their enjoying some mitigation of the restrictions characterizing so-called ordinary language and more or less recognizable modulations thereof, we must now ask what the import of the foregoing discussion might be for our understanding of the distinction between ‘metaphor’/‘metaphorical’ and ‘literal’ (in the familiar sense) frequently drawn by some of its philosophical and critical students.

If the foregoing be taken for a “theory”—a kind of spectation, a lifting up for inspection of the forms of our speech from the matrices of practice where they lie—we are reminded of a nice perplexity concerning the relation between any theory, in the above sense, and the practice from which it derives. The difficulty of specifying this, even in the case of scientific inquiry, where many philosophers of science, having complacently misdescribed the relation and then on the basis of this misdescription have made science the paradigm of all inquiry, is, as we have seen, a central concern of Michael Polanyi in *Personal Knowledge*.

For, as is obvious, by the time we encounter explicit formulations of the criteria of what constitutes knowing, and the articulation of particular pictures of the relation between, on the one hand, the gestalten of our mindbodies engaged in our personal acts of coming to know, upholding our knowledge, and endorsing our own competence to do so and, on the other, the several elements of the objects of our knowing, we have already for a very long time been acting as if we believed many things, have been believing ourselves to *know* many things, and have been asserting that this was and is the case.

Similarly, by the time we begin to formulate methodologies for doing so we have for a very long time been engaged in inquiry. An explicit statement of a methodology is therefore necessarily an attempt at an after-the-fact description of an actual practice that has achieved its end; or it is the explicitation and explicit espousal of a set of epistemological values that have long been tacitly held. The paradigm discourse on method of our tradition, Descartes’s *Discours*, obviously did not surface ex nihilo. It is rather the explicitation of themes, motifs, models, metaphors (in the familiar sense), and analogies—in short a picture—with which Western sensibility had been flirting since at least as far back as the quattrocento in Italy.

It would be comforting if we could simply designate speaking and writing (whether metaphorically or literally), hearing and reading as first-order activities, and the act of reflecting upon these as a second-order activity, which would yield an exhaustive, faithful, and parsimonious description. However, as we can now see, no such comfort is available. First there are limits of reflection’s flexibility; and second the instrument of reflection itself is language, shot through for us with plexuses of metaphorical intentionalities among which, as reflection is achieved (that is to say, as the prereflective becomes manifest through act in speech—*spirit thereby making its decisive appearance in the world, being at once bonded and oppugnant to letter*), we form, tacitly exercising our options among these plexuses as we

do so, *one* picture rather than some other. The relation between these two orders—if we could even speak of them so—would be more complex than this and, perhaps, differently complex at different times.

Having warned of the dangers of aspiring to some bedrock *logos* clearly and fixedly distinguishable from *mythos* for whose existence we have no “personal” responsibility in our convivial acts of mutually speaking and hearing, writing and reading; and of the dangers, too, of taking the relation between my particular way of lifting up for inspection the forms of our speech from the matrices of practice where they lie embedded; it is easy to suggest what the import is of my new angle of vision upon the relations of ‘metaphor,’ ‘metaphorical,’ and ‘literal.’

In a sense nothing has changed; everything remains essentially the same. We may go on talking as we pretty much always have. Philosophers and literary critics may institute ways of talking about the metaphors and invite us into the conversation; epistemologists may declare a “privileged language” to score a point or mark a boundary, although this will always be disciplined and constrained by the reality that makes its appearance within our mutual form of life. Nor does saying this, that is, indicting the language realism into which we so often absentmindedly stumble, force us into some kind of “idealism” or “subjectivism.” The world remains pretty much what we have always commonsensically thought. There is after all *la langue*, the inherited *letter* in the matrix of our form of life. Without this primitive entity which is given we could not, through act, move mindbodily as persons from prereflection into speech. This is the true insight only partially described, hence misdescribed, by language realism. But equally there is *la parole*, spirit, an act of speech, personally backed, indissolubly bonded to the letter, which is *given* and, in being spoken, is given *forth*, in all of its worldly palpability; yet to the letter always irreducibly oppugnant.

What an effortful way to declare that we are incarnate beings, irreducibly carnal spirits, actually existent mindbodily persons! Yet, if it is to be seriously said, this kind of effort is required, since we carry about inside ourselves the picture from the philosophical tradition that renders the saying of this problematical in yet unimagined ways.

Now to the question of the special status, if any, of formal logic and mathematics as languages—in particular, mathematics.

Earlier in the course of giving some concreteness to the claim that there are important analogies between the integral mindbodily acts of stroking a tennis ball, on one hand, and formulating and asserting a theory or devising and stating a description of the world on the other, I was at some pains

to distinguish between the second-order *description* of “Poteat stroking a tennis ball” and the first order *actuality* which of course does not appear in these pages but which the description is presumed to express and embody. I advanced this claim in the context of arguing that our language is shot through with metaphorical intentionalities and that therefore, if it depicts the relation between asserting something about the world as being like stroking a tennis ball with a racket, we will then have *one* picture of the relation between language and “what language is about” rather than any other. And this seemed, if true, to be very important.

In order to elaborate some of the complexities of the relations between the actuality of my own mindbodily activities of stroking or asserting and my mindbodily activity of asserting *descriptions* of the actuality of my activities of stroking and asserting, I described at some length what it is for me to stroke a tennis ball and for me to be under the observation of a tennis professional as I do so. There I said:

When I stroke a tennis ball, my body and I are in the world, “behind” the seamless arc that ends in the impact of racket head and ball and in the follow-through: “behind” the seamless arc as its integration. But I am able to stroke the ball at all only because I have *disattended* from the way I am in the world “behind” the seamless arc in order to *attend* to the flight of the ball in order to strike it.

I then went on to suggest that:

The tennis professional from whom I am taking a lesson attends instead to the way I and my body are in the world “behind” the seamless arc and to the way I dwell in that arc as I execute the stroke and follow-through. He has disattended from *his own* being in the world in order to attend to *my* being in the world. This *I* can do, if at all, only marginally while stroking a ball. *Yet if my mindbody were not able to integrate, quite seamlessly, the explicit analysis of my stroke by the tennis pro to its own motor acts—and, in time, to do so quite flawlessly, without even vague maxims for how this is to be done—then tennis lessons would be impossible.*

This of course is the sort of event that occurs on thousands of tennis courts every day, occasioning perhaps some sore muscles and a blister or two, but emphatically no “mental” cramp. One may often come off the courts remarking a sore shoulder, tennis elbow, or fatigue; but rarely, if ever, either intellectual clarity or bewilderment concerning what was hap-

pening as one, without even a moment's thought, successfully translated into one's own game the words and gestural demonstrations of a tennis pro. The obvious inference to be drawn from this fact is that we all manage these enterprises quite well: we seamlessly integrate the tennis pro's explicit analyses of our strokes to our own motor acts without even vague maxims for how it is we are to accomplish this integration. And even saying how it was done after the fact would be, under the best of circumstances, no small feat.

It seems to me clear that we normally do not find problematical in the least the presumption that the *description* of "Poteat stroking a tennis ball" expresses the *actuality*, Poteat stroking a tennis ball. To be sure, there may be disputes over whether or not the description is accurate; and attempts can be made in the face of criticism to adjust the description to the actuality — though let it not be supposed that it is an easy thing to specify what is happening when a description is being adjudged to be inaccurate or easy to say what we do when we set out to adjust the description to the actuality. Under normal circumstances however we do not seriously wonder whether or, if so, how there can be a congruence between the ideality of a linguistically formulated description of one logical-ontological order and an existent actuality which is of another.

In using 'ideality' in the locution 'the ideality of a linguistically formulated description,' I mean to express the character of language as at once, *in some sense*, both a reduplication and reflexive extension of the actuality of speakers and their ambient world, on one hand, and an abstraction and alienation from it, on the other: abstraction in the sense of "drawing away from" and also abstraction in the sense of an *abstract*—a schematizing, epitomizing, and "reducing" of that actuality, which reduction however retains its attenuable but ultimately irrefragable bond with the actuality that is its source. I say "in some sense" because from one point of view much of the history of philosophy could be described as a sustained colloquy on the question: does language reduplicate actuality and, if so, in what sense? Since I presume in these meditations to be offering yet another way to look at this question, I do not wish either to settle or to beg this question. Let us take but one sort of case as illustration. In contradistinction to modern dance, which abstracts from the "narrative" force of gestures and which concentrates instead upon the forms of grace and power that may be expressed in the exploration of the limits of the living human body, subject to space, time, and gravity, classical ballet tends to be more explicitly narrative in character. It therefore embodies its story in "ideal"

(in my above sense), formalized gestures that, even though possessing ideality, obviously retain a more intimate relation to the actuality of the motile mindbody in its world than does a story narrated in words. Therefore its ideality is less great than that of either verbal narration or description. At the same time, even the rarefied ideality of higher mathematics, be it ever so abstract and attenuate vis-à-vis the living mindbody, still retains an irrefragable bond with it.

Our confidence in the power of spoken or written language, soon or late, to reduplicate and stabilize among us a palpable and worldly reality less fugitive than our private perceptions but comfortably consanguine with them is, surely, bedrock. At this acritical confidence I have not the slightest wish to cavil. However here we are reflecting upon the nature of reflection, upon what it is on which in reflecting, reflection turns back, upon the question as to how it can be that reflection comes to bear upon its object. We may conclude at length that these are unanswerable, even illicit questions—questions that arise at all only when “language goes on holiday.” However, this is better concluded at length than at the outset. For it does appear that something singular and crucial occurs in the event on the tennis court of which we would be hard pressed to give an account; and that *prima facie* this remarkable power of “translation” back and forth between motor-acts and speech-acts has no or very little standing in the received theoretical accounts of our powers of knowing/doing. Indeed we may well wonder, if this proves to be the case, whether accounts granting no important standing to these powers are not for that reason alone seriously deficient.

But let us look more closely at what is given above. First there is what is expressly embodied in the ideality of the linguistic forms of the text you have just read, with which the words you are now reading are continuous. Second there is what is *not* embodied in the text, namely, the unreflected, unexpressed *actuality*—viz., Poteat stroking a tennis ball—which even so is *intimated*, obliquely alluded to, by the text. We can make one of several possible inventories of this situation. The thing we notice among the merely intimated is the immediate actuality of my tennis stroke *for me*. As I am “behind” it, in the midst of the arc of the stroke as it is being executed, I am seamlessly integrated mindbodily into the immediate actuality: “myself hitting the ball.” The words I have just used are designed to *allude* to the immediate integrity of this mindbodily event in such a way as to enable us to distinguish between on one hand, its *immediate actuality* and, on the other, the *mediated existence* “it” would come to have were I to undertake

an exhaustive analysis and description of it on this page. And there is of course the anomaly of my not being able *on this page* to present the actuality of myself *for myself* as hitting the ball by, say, jumping up from my writing board, seizing my racket, and executing the stroke; as there is also the anomaly of my not being able to present the actuality of myself for myself *to you*—except through the medium of this text by means of which I can *intimate* this actuality.

The second thing to be noticed among the merely intimated is the immediate actuality of my tennis stroke for the tennis pro who is observing it. All of the same anomalies that appeared in the text in relation to the first case appear here as well. Quite possibly because they do and also because we routinely fail to notice the difference among (a) the immediate actuality as such, (b) the immediate actuality as *intimated* in this text, and (c) the event as mediated in the ideality of language—so unreflectingly and infallibly are these woven together—we may fail to find anything worthy of note for our accounts of our powers of knowing/doing.

Thirdly, there could be among the things merely intimated the reduplication in the immediate actuality of the tennis pro's own mindbody the actuality of *my* mindbody as it is at the center of the event "myself hitting a tennis ball." He says, imitating the way I have executed the stroke: "See? This is what you are doing." Gesturally, with the totality of his own integral mindbody, he dwells virtually in mine and then exaggerates my movements in order to caricature the stroke. And I "see" what I am doing, see it mindbodily with such an immediacy that its awkwardness and "impossibility" are obvious. This I see immediately, without reflection or the interposition of language. I see it in or with my unreflecting mindbody.

How, after all, we may ask, does the tennis pro *imitate my movements* with *his* movements? For, without the interposition of words *describing* my movements, without reflection, he quite routinely incorporates into his own mindbody the motifs of mine; he allows to inform his movements the *logos* that informs *mine*. And when he makes to *exaggerate* my movements, he *departs* from its motifs and *logos* only to a certain extent and not beyond it, for I recognize, with no comment from him, that he is putting a caricaturing pressure upon the motifs and *logos* of *my* movements. Without verbal clues I immediately recognize *myself* in all these. How does all this happen? How do these translations occur without the intervention of even verbal clues? None of us can doubt they matter-of-factly do. Yet where in the accounts of our knowing/doing are these questions asked, let alone answered?

Finally, there is intimated—and we can now make it somewhat more express and mediate—an elliptical reduplication *in his own words* of the mocking caricatured stroke that the tennis pro executes. “Your elbow is out in front of your wrist,” he says. “Your weight is on your back foot” (he gesturally illustrates); “your wrist is slack; you are lunging at the ball, slapping at it” (he demonstrates); “the whole movement is jerky; you are not letting yourself do what you can do quite well when you walk through a crowded room.”

I am not at all arguing of course that there is some sort of one to one conformity of the elements of a movement into the different, but perhaps purportedly isomorphically structured elements of a lingual description. I do contend however that there is *a genuine cognition* between what the pro does with his mindbody in imitating my movements and his accompanying commentary upon it. I emphatically do not hold that his words are telling me “what his movements mean.” Their connection, though *real* and *intrinsic* to our nature as mindbodily behavers, actors, and speakers, is looser than the image of isomorphism suggests and is therefore unspecifiable.

As I behold the immediate actuality of the caricature of my stroke, seeing mindbodily with immediacy its awkwardness and impossibility because seeing immediately and contemporaneously what by contrast “feels” more integral with my presently actual mindbody; and as I listen to the tennis pro’s elliptical reduplication in his own words of the caricatured stroke that he is executing and to his words about how I should change it—“Keep your wrist locked, move your weight forward as you move into the stroke, don’t slap the ball; stroke *through* it” (all this accompanied by the immediate actuality of his demonstrating gestures)—I am instantaneously apprehending *the immediate actuality of his demonstration in the immediate actuality of my own mindbody as I imitate him*. I am also instantaneously translating first into the virtual and then into the actual movements of my mindbody the tennis pro’s own verbal but elliptical reduplication of his demonstrating gestures—itself a translation by his mindbody of the immediate actuality of his own mindbodily grip upon the world with his gesturing movements; and finally, I am, quite seamlessly and without ever having had explicit instruction in how to do this, integrating these. In other words, I get an immediate mindbodily grip upon the immediate actuality of the pro’s demonstrating gestures and upon his elliptical verbal reduplication of these with what amounts to a kind of practical infallibility, even though *in reflection* I have not the slightest idea of how the ideality of language can *even elliptically* reduplicate the immediate actuality of

movement. Is the inference to be drawn from this circumstance anything less than that sentient movement (be it ever so putatively “primitive” and “meaningless”), gesture, and fully articulated verbal language—even the notations of formal logic and mathematics—are connatural in the most radical sense; and that indeed if this were not the case, our sentient movement could never issue in abstract intelligence; nor could we have the intuitive certainty that articulated language has a bearing upon something other than itself. At length these observations may prove to have little or no significance, it is true. However, whether because they are held to have no place or because they have merely been overlooked, there is no denying that traditional accounts of our knowing/doing do not contain them.

Our inherited, sometimes sharp, dichotomies between pure reason and practical reason, between knowing and doing, between articulate language and sentient movement, between extralingual action/behavior and speech have not afforded the ground for the asking of these questions because they have not adumbrated the basis for a possible answer.

We could, after all, suggest that between sentient movement and gesture there are at once irreducible continuities and discontinuities, as there are also such among sentience, motility, gesture, and fully articulate speech. The picture that has appeared to dominate the imagination and that we find expressed in the philosophic tradition is one in which the words—tokens in the setting of a written or writable and readable language—are taken as the root paradigm of meaning, intelligibility, and reality. From this it necessarily follows that the meaning, gestalt, telos, motif of sentient movement and of gesture—when directly or when, more often, obliquely treated in the context of philosophical discussions of ourselves as rational or as verbal beings, in despite of our being inextricably embran-gled mindbodily in the plexuses of speech—are thought to be derivative, second-order, existing only for reflection and after the fact. They are taken to be at their least mere *accents* for our articulate speaking; even at most to be mere analogues and accompaniments of the meaning of words—rather than the other way round, their *radix*, ground, and intentional *arché*, hence connatural with them, as I should hold. For such a picture, gesture is *au fond* a supplement to articulate speech: in other words, it is secondary and derivative of our powers of articulation, rather than agnate with them and with sentient movement, as I shall contend.

Even this inherited view is not without a residue of profound, even if unnoticed, puzzlement. The view that the meanings of gestures are the analogues of the meanings in articulate speech—that gestures supplement

and complement our articulate speaking—requires us to ask: what common *logos* is obtaining between what I say and the gestures I use as I say it, that makes possible the existence of the analogy or consanguinity between my words and gestures? Can a gesture whose relation is merely extrinsic (as opposed to radical and intrinsic) to the spoken words it “accompanies” really supplement and complement them? Nothing so readily serves to answer these questions as the comic effect produced by a maladroit speaker who has explicitly tacked onto his prepared speech a repertoire of extrinsic, artificial, hence nonconnatural, gestures designed to introduce certain emphases along the way. His speech will give the curious impression of being disembodied—as, in a sense, it is.

The connaturality of sentient movement, gesture, and articulate speech was brought home vividly for me as I once observed a rather testy colloquy between a very proper English lady, who operated a *pension* in Athens at which I was staying, a trio of Australians who wished to book a room, and a Greek taxi driver who had fetched them there. With her arms folded across her bosom, the English lady told the Australians in a measured, polite, and clipped English way that there were no rooms available. Her posture, itself massively gestural and wholly consanguine with the gesturing of her clipped mode of articulation, was all of a piece with her genteel, proper English diction. She was being both polite and very firm. Finally the Australians asked what, if there were no rooms, they were to do. Still in her measured, proper way, her irritation becoming more manifest in the tightening of her folded arms, she said, “Well, there is ‘The Diogenes’ at the top of the street.” With this, the Greek taxi driver, who had another idea, for pushing which he stood to gain a small commission, entered the discussion with all the emphasis and gestural flamboyance characteristic of lively Greek speech. In the twinkling of an eye, the tightly involuted gestural style of my English friend became the baroque gestures of a native Greek. No one beholding this scene could believe otherwise than that we dwell with no mindbodily reservations in the *whole mindbodily style of our native language*—words and gestures, whose relations are intrinsic and connatural—and also in that of any other language that we come to speak with some fluency. On this same visit to Greece I found that my friend Moustakas, with whom it was possible at times to carry on quite subtle conversation face to face in a combination of my poor Greek, his poor English, and the poor Italian of both of us, was reduced to stammering when he tried to speak to me by telephone. The gestural setting of speech-acts was virtually eliminated in this case. He could not “get into” English

because there was no “place” for him mindbodily to take up residence in it.

The traditional picture, then, takes the autonomy of *logos*, as affiliated with the words *simpliciter*, to be given. Hence the grounding of logic, as traditionally understood, is in principle nonproblematic; even more nonproblematic therefore is the question of the way in which our abstracting rational powers might be consanguine with our sentient motility, with our powers of mindbodily orientation in the world, and with gesture, since given these premises the question does not arise. Above I observed that there are many words in both ordinary language and in philosophic discourse, and even in the special vocabularies of multifarious intellectual disciplines, that are fundamental: they variously serve to state or allude to the ubiquitous, rudimentary, and obvious fact and differing forms of the connectedness of things: ‘form,’ ‘whole,’ ‘order,’ ‘integrity,’ ‘cause,’ ‘reason,’ ‘motive,’ ‘meaning,’ ‘gestalt.’

It has seemed intuitively obvious to me that the most archaic sense we have of ‘form,’ ‘whole,’ and ‘meaning’—let me take these as representative of the whole group and of yet others not included above—is grounded in the given, unreflected, and indeed prelingual integrity and natural gestalt of our tonic, sentiently oriented, and motile mindbodies, taken in and of themselves in their interpersonal, convivial *mise-en-scène*; that we primitively and immediately “know” form, wholeness, and meaning, for they are the radical existential modalities of our own being in the world, *long before we have words or concepts to embody this “knowledge.”* Indeed so archaic and importunate is this “knowledge” that we must “acknowledge” it as the most proximate ground of our very power to generate words or concepts which we bring to bear upon that in the world, including ourselves, to which, also because of this archaic sense, we have discerned their appositeness. *‘Form,’ ‘whole,’ and ‘meaning,’ as they appear in reflection, presuppose themselves prereflectively.*

What I am claiming here stands on more radical ground than that upon which Hume and Kant—to take but these two as exemplars of the tradition—were arguing as to the origins of concepts. Hume held that all concepts derive from experience; Kant that all concepts that neither stand in synthetic a priori propositions nor are transcendental ideas of the pure reason are empirical concepts, i.e., derive from “experience.” Whatever their sectarian differences, both Hume’s and Kant’s accounts of “experience” are *static*: dissociated from the temporality, historicity, and intentionality of an actually embodied “epistemological subject.” For Hume therefore “self-

identity," hence selfhood, became (philosophically) problematic. For Kant of course the concept of the self appears in a most ghostly fashion in three ways: as the regulative idea of an empirical psychology—a transcendental idea of pure reason; as the 'I' (genitive case) that does no more than make it possible for one to say of his own experience that it is *his*; and as the "subject" of the sense that there is something that "I ought to do," thereby suggesting at least that the self might be given to doing something.

The static, visual model dominates the epistemological exposition of the (atemporally) logical structure of the conditions of knowledge, conceived as an accomplished fact. With no significant deviation from the model of the paradigm knower as the mature, rational, lucid, "objective," ahistorical man, given in the Cartesian Enlightenment, and produced by Descartes as he systematically dehistoricized and desituated himself by jettisoning all of his previous opinions en route to his sole certainty, the epistemological subject under investigation in both Hume and Kant has, in their accounts, no living body with a place in the world, has arrived at the present moment of inquiry bearing with him no historical past, and therefore his contemporary mindbodily reality makes no appearance.⁵

By contrast I have undertaken consistently to place the subject of epistemological investigation in the "intentional arc"⁶ of the activities of puzzling, formulating a question, seeking an answer, coming to know, upholding, accrediting, and making knowledge claims with universal intent. The picture of the knower's situation is therefore shot through with time, history, place, and intention. He bears within him a past and therefore both the history and contemporary temporal density of his own tonic mindbody; his culture, his "merely" animal preverbal but convivial infancy and childhood are co-present with his contemporary feats of rational judgment, limiting the discarnate lucidity of the knower in the Cartesian picture, but also providing real traction in a real world. Consequently when I claim that the sense of concepts such as 'form,' 'whole,' and 'meaning' are "known" by us as radical in our existential modalities long before we have words or concepts in which to embody this "knowledge," thereby claiming that in a sense they are "derived from experience," 'experience' has a very different force from that that it has in the discourse of Hume and Kant.

Indeed I am making the claim, perhaps outlandish on its face, that we are misled if we seek the roots of mind, of language, and hence of reflection by reflecting upon speech phenomena, as these are depicted by writers, though very different among themselves, such as Bloomfield, Skinner, Chomsky, or Hockett⁷ because these roots in fact lie deeper than can be

reached by their methodologies: so deep indeed that only by reflexively reflecting upon reflection itself can we *allude* to that immediate “knowledge” we mindbodily and archaically have of the sense of ‘form,’ ‘wholeness,’ and ‘meaning’ prior to our possession of words or concepts for expressing form, wholeness, and meaning. I am, in short, claiming that our sentient movement, gesture, speech, and intelligence are agnate and consanguine, therefore, continuous with one another, even though the last is emphatically not reducible to the first. Whence it follows that “mind” expresses at a “higher” level the order, the integrity of our living and tonic mindbodies; and thus that without this “primitive” order and integrity there could be no such thing as “mind”—phylogenetically, ontogenetically, or even contemporaneously—in the performance of any “intellectual” feat.⁸ Merleau-Ponty in *The Visible and the Invisible*, as James M. Edie has remarked,⁹ attempts to show that the human body “as a system of structured possibilities for future action” is “structured like language.” The view to which I am arguing is the inverse of this: language is structured *upon* and therefore structured *like* our sentiently oriented and motile mindbodies. This cognation we may descry, if at all, only in reflection upon reflection.

XI

Let me undertake to induce the sense of this by using a different kind of case from that of my tennis lesson example, namely, the case of my situation before a page of printed text. In *Language and the Discovery of Reality*, Joseph Church says, in speaking of levels of perception:

We can recognize two major kinds of perception, each of which has a mature and an immature version, and each of which represents a way of being mobilized toward reality. The first kind is what we have called *participation*, where we respond organismically in an unmediated, reflex-like way to the dynamic, affective, physiognomic properties of the environment. The second is *contemplative perception*, where action is suspended in favor of inspection, judgment, and analysis.¹

The passage is a model of lucidity and I understand its meaning immediately. Yet how did I ever learn to do so, and how do I actually do so upon this particular reading?

As one possibility, at a certain level, I find the Wittgensteinian kind of answer entirely satisfactory: I have been apprenticed to a “form of life,”² I have learned to speak my native language, and therefore I have been trained to read it³ by playing language games in and with that language.⁴ What then still remains problematic? Why is the appeal to one’s “form of life” not sufficient? The brief answer to this is: if we are to be trained to the learning of language, if we are to be apprenticed as learners of its language to the convivial order into which we are born, certain prior conditions will have to have been met. It is embarrassing to be forced by our systematic second-order Enlightened amnesia to make much of such a truism. And yet, let us say it: we will have to be the sorts of *preverbal* organisms for whom this is a possibility.

An inference that might be drawn from this remark is that I suppose that Wittgenstein would wish to deny this or that his metaphor of a "form of life" does not include these "prior conditions." I do not hold the first view. As to the second: Wittgenstein, in *Philosophical Investigations*, where the "form of life" metaphor appears frequently, seems to me steadfastly to resist the explicit raising of the "semantical" question that would lead to the extralinguistic setting of our "form of life." When for example he is talking about the transactions between the builder and assistant, the existence in a world of the builder and his assistant, among pillars, slabs, and blocks is obviously presupposed by him, albeit quite properly not singled out for special attention. His concentration upon the "logical grammar" of language, upon "language games"—even "form of life"—assiduously avoiding as he does the name-relation, hence the straightforwardly semantical, theory of meaning which he felt had held him captive in the *Tractatus Logico-Philosophicus* and against which he polemically devises the "meaning of a word is its use in a language" alternative theory—could easily lead Cartesian exegetes of Wittgenstein to imagine that "form of life" is a kind of super language game in which what I am calling "prior conditions," even when obviously present, are taken to be philosophically trivial. Wittgenstein speaks more openly or alludes more forthrightly to what I call the "prior conditions" in his *On Certainty*.

The rationalism of the Enlightenment is not much interested in these facts about ourselves. Obviously these conditions not only are met, but are an essential part of any second-order account, though not as Skinner or as Chomsky would argue. In Skinner's picture of these conditions language is deprived of any autonomy by being reduced to plexuses of mere stimulus-response connections in the body; in Chomsky's, language is granted full autonomy as language—that is, as words and sentences governed by grammar and syntax, both surface and depth, rooted in innate powers of the mind Cartesianly understood—but in such a way as to underscore in a new and sophisticated way the mind-body dualism.

Chomsky would almost certainly deny the claim that he endorses a new and sophisticated mind-body dualism, probably contending that after all, he develops no explicit views on this matter in his writings on linguistics, even though he probably would, if asked, in fact reject dualism. However, such a defense would be difficult for him to sustain, not because he explicitly calls himself a linguistic Cartesian, but for other more substantive reasons. It is the Cartesian endorsement of a language faculty "unbounded in scope and stimulus-free" that, it appears, attracts Chomsky to Descartes,

not the latter's dualism. However Chomsky does say: "Man has a species-specific capacity, a unique type of *intellectual organization* which *cannot be attributed to peripheral organs or related to general intelligence* and which manifests itself in what we may refer to as the 'creative aspect' of ordinary language use—its property being both unbounded in scope and stimulus-free."⁵ Here Chomsky is summarizing and appropriating as his own what he takes to be the gist of Descartes's views on our language faculty. It appears in what he has said here that not only is the language faculty an isolate from the mindbody, it being connected with "a unique . . . *intellectual organization* which cannot be attributed to peripheral organs"; it is not [even] related to "general intelligence." Here Chomsky evidently wishes to put a great distance between himself and Skinner, but labors too much, it seems, under the strictures imposed by the burden of his early polemic against the latter. His own view, under this burden, has become the inverse. Skinner places our language faculty in the neural paths of the body; Chomsky places it in the innate ideas of the mind. These fairly well exhaust the options afforded us by our philosophic tradition. Between Skinner and Chomsky the mindbody is sundered. To achieve parsimony in devising a theory to account for the "creative aspect" of ordinary language use, Chomsky abstracts linguistic *competence* from the concrete setting of actual linguistic performance. In his model, man, in the twinkling of an abstraction, ceases to be an actual speaker and becomes an abstract, competent, worldless "operator" of this rule-governed but open grammar. In short, man becomes strictly inconceivable. Such plausibility as the theory can have therefore must depend entirely upon our overcoming its abstractness by tacitly supplying an actual context of speech-acts as its setting. Skinner's theory is incoherent—it cannot make sense even in itself. Chomsky's theory is incomplete—it makes sense as far as it goes, but needs supplementation. It cries out for completion. The demand for sense of our integral mindbodies in the world is so exigent that it will not be successfully denied. Interpreted and completed by modern Cartesians, the incomplete and therefore potentially incoherent theory of Chomsky becomes *actually* incoherent, i.e., dualistic.

By contrast, I wish to make plausible the claim that the preeminent "intellectual" power of our integral mindbodies is the power of analogizing. Our language-acquiring feats are grounded in this capacity. This power is archaically rooted in the tonic, oriented, ordered, sentient motility of our mindbodies.

I shall return to the quotation from Joseph Church to perform a detailed

analysis of my relation to the text with a view to answering on my own premises the question: how did I ever learn to read and comprehend the cited passage, and how do I actually do so upon this particular reading?

First however the reader may be helped by knowing where it is that I shall come out on these matters, set forth straightforwardly, dogmatically, and at the outset. All of us learned to speak and then to read and write our native language as the result of the transactions we had as persons amidst other persons in the lively conviviality into which we were born and within which we grew into our humanity. This sounds like another embarrassing truism—as indeed it is; but one that has largely been ignored in accounts of our knowing/doing and one that I wish to take with utmost epistemological seriousness. I am not of course just claiming that we could not have learned our language without having ears and mouths. Rather what I am claiming is defined best in opposition to what I take to be the regnant intellectualistic *picture*, rarely if ever explicitly delineated, of the process and ground of the language-learning process. The picture represents this feat which we routinely perform as primarily and preeminently an *intellectual* as opposed to a fully mindbodily one. In this picture the use of articulate language is the apex of our *intellectual* as opposed to our integral mindbodily powers. Intellect—most fully expressed in our articulation of the strict formalisms of logic and mathematics—is, in this view, not only that in virtue of which we surpass all other animals, but that also by means of which we are able to transcend our own animal nature sufficiently to render it nugatory to any account of our human being as rational. In the regnant view then we learn language with our *minds* as opposed to our mindbodies. Such a picture of language learning is entirely congruent and indeed conceptually consanguine with a mind-body dualism, a dualism by means of which the intellectualist has been able consistently to sublime “pure” intellection—that is, the intellection of a discarnate mind.

A computer of course is the perfect model for expressing this picture of language learning. Computers, though they obviously take up space and time, as does my body, do not have bodies as I have one, i.e., as a whence *from* which they can make self-referential “statements.” To illustrate trivially but tellingly, a computer cannot refer to its “own” spatiotemporal body with any part of that “body” as I do when I tap my chest with the index finger of my right hand and say: “*I* shall do it.” And this is because, unlike me, it is without sentience, motility, and orientation in the world, powers that I possess because my mindbody is in “communication” with itself throughout the whole range of its being. Between the software and

the mainframe of a computer there *is* no such communication. Our actual superiority to computers does not reside in those of our powers so prized by the Cartesian Enlightenment, namely lucid reflection governed by explicit rules. Here we are no match for computers. It is those “rational” powers we share with animals, so much an affront to the Enlightenment mind, that in fact give us the edge.

This distinction remains irreducible, even if we imagine a computer with a mechanical “arm” and “hand” by means of which it can “point” to itself and even if it can print out “I have made a self-referential statement accompanied by a self-referential gesture.” The temptation to imagine otherwise is great, seeing that we are induced by the picture we have of ourselves and of computers to forget or to ignore as trivial the fact that the concept ‘self-reference’ has and *can only have* its original meaning in our own mindbodily acts of self-reference, presupposing a worldly *other*, over against us, and is at most *imputed* by us to the computer, which could never derive the concept from its own mechanical “self-referring” behavior, however complex and protracted this might be, since it is quite *worldless*. This temptation to imagine that the distinction between the “behavior” of computers and the behavior of men is reducible is a striking example of the simultaneous operation of our mindbodily demand for a larger sense coupled with the second-order *picture* from which this demand has been eliminated. If you choose to conceive of men as like slow-witted computers, then, in obedience to the demand for sense, the computers must be imaginable as doing with language *all* the sorts of things that men do with it. Hence the mechanical arm that is supposed to do the same thing as a gesturing human arm. In following the logic of the picture in which we are immured, the mechanical arm is depicted as “doing the same thing” as the gesturing human arm—which, as I have held, it obviously cannot do.

For me to “teach” a computer the language Fortran and for it to “learn” that language does not depend upon the mediation of a sentiently oriented, motile mindbody in a world—which, in the indicated sense, it logically could not have. Noam Chomsky’s picture of the language-learning capacity is indeed Cartesian and intellectualistic. In seeing man’s uniqueness in the “creative aspect of language use,” and in making central to his theory a picture of the *ideal* “speaker” who infallibly exhibits linguistic *competence*—as opposed to an actual speaker whose linguistic *performance* is subject to the errancies of existence, Chomsky unwittingly invites us to conceive of ourselves as computers.

The literary critic George Steiner has very astutely remarked⁶ the opera-

tion in Chomsky's imagination of the computer model, borne by such crucial words and phrases as 'feedback,' 'special design,' 'data-handling,' 'presetting' (of the brain), but he lacks the philosophical sophistication to press home the point in the face of Chomsky's rather silly, philosophically naive, and unresponsive denials. (These are included as notes in Steiner's own text.) In view of these intuitively shrewd misgivings, Steiner observes: "I am persuaded that the phenomenon of language is such that a rigorously idealized and nearly mathematical account of the deep structures and generation of human speech is bound to be incomplete and, very possibly, distorting. It is the refusal to see at how immediate a level problems of formal description become a matter of general philosophy and of the image one has of man's relation to the Logos."⁷ Precisely so!

From an entirely different direction, Charles F. Hockett in *The State of the Art*⁸ has demolished Chomsky's attempt to embrace an "intellectual organization" in man that is species-specific and is the source of the "creative aspect of ordinary language use" and is simultaneously "unbounded in scope" and "stimulus-free" by an appeal to the distinction between a well-defined system and an ill-defined system. "A *well-defined* system is any system (physical, conceptual, mathematical) that can be completely and exactly characterized by deterministic functions. Thus, an *ill-defined system* is one excluded from the theory of computability and unsolvability"⁹ (emphasis in the original). An account of our language faculty that is "unbounded in scope" and appeals to *specifiable* transformation rules is precisely the model of a well-defined system that is an *ill-defined* one!

What it is crucial for us to see about Chomsky's program is this: he investigates our power to form and comprehend novel sentences as if it were a question of how our minds—in the Cartesian, discarnate sense—work. And he sees minds at work paradigmatically in the "competent" formation of novel grammatical sentences in accordance with a "depth grammar" equally, indeed doubly, discarnate by reason of his notion of the implied contrast, actual *speaker-competent* "speaker." This being so, Chomsky's views perfectly illustrate the intellectualistic picture of our language-learning powers. There is a sense in which we can hardly be said to *learn* language, since it is innate.

Now let us return to the passage from Joseph Church above. How do I stand vis-à-vis this page of text? How in particular do I read and instantly grasp the meaning of what it says? To answer these questions, I shall undertake a radical, reflexive phenomenology. In proposing to do this I do not imagine, you will recall, that this inquiry will be presuppositionless.

On the contrary, it is my contention that what I shall say, what I shall be able to *think* about these questions, will be inescapably shaped by the picture formed through and within the metaphorical intentionalities of my language.

It should also be remembered that this analysis is a second-order activity that makes no contribution whatever to the perfection of my first-order skill of reading and understanding Church's words.¹⁰ This second-order activity is designed rather to examine the phenomenon of reading and comprehending a text in the light of a picture in which the radical given is the tonic, sentient, motile, intentional, integral mindbody. There is no need to know any of this, to have any picture whatever, as a *condition* for skillfully reading and comprehending the words. However, the philosophic tradition, especially from Descartes onwards, has generally propagated a picture in which the discarnate mind rather than the integral mindbody is the radical given. Consequently it is this Cartesian picture that has ubiquitously and comprehensively shaped our conceptions of how we do and how we are *able to do* what we do—even as it has formed *our conception of how we initially learn our native language* and how, having learned it, we are able to practice in particular instances what we have learned. Since this ubiquitous and comprehensive picture does indeterminately fashion our way of conceiving of ourselves in the world, it is desirable to offer a different, countervailing, and as I contend, more accurate picture.

When I enter upon my second-order activity and approach my questions: how do I read and instantly grasp the meaning of what the text says?—at once *having*, as I do, and *being in the midst of*, as I am, a picture of my own mindbodily being before the text, in which picture my mindbodily being is the *radical given*—what is elicited for reflection from the phenomenon of reading and comprehending? What, given this picture of myself in the world that I both *have* and am *in the midst of*, come to be the “transcendentally deduced” conditions for the possibility of my doing what I indubitably do, viz., read and comprehend the text instantly?

In reading Church's words, “we can recognize two major kinds of perception, each of which represents a way of being *mobilized toward reality*,” I am aware in reflection that, especially, the words ‘mobilized toward’ get an immediate grip upon my mindbody; that there is a subtle and virtual sense of my being mindbodily *mobilized* by these words, mobilized toward everything that is vaguely and indeterminately “other” than my mindbody; that my comprehension of the words ‘mobilized toward reality’ in fact *depends* upon this virtual and attenuate mobilization of my

integral mindbody. There is nothing figurative in my saying this. My claims about the participation of my "body" are just as direct as they can be. It is not just that my "body" has to be present before the text so that my eyes may be in order for me to "see" the constituent words, thereby to read and comprehend—a truism as far as it goes, but even so a dangerous one, since it tacitly grants aid and comfort to the intellectualist picture of the learning and the using of language. Nor is it only that to reflection, *when governed by this picture*, the "seeing" of the words 'mobilized toward reality' seems to be in fact accompanied by a, in a sense, virtual and attenuate but, even so, quite real mobilization of my integral mindbody. Rather it seems to me that this rarefied and implicit mobilization of my mindbody by these words is absolutely the *conditio sine qua non* of my reading and comprehension. The reading and comprehending is neither just a stimulus-response somatic transaction with the text nor yet merely a mental, bodiless, computer-like "processing." It is a virtual integral mindbodily *incorporation*—I mean this "literally" (in a manner appropriate to this context)—of the words in the text: I do not, in other words, rely primarily upon what for modern common sense is my *body*, nor do I rely primarily upon what for this same common sense is my *mind*. A radical *tertium quid* (more radical and integral than just body *simpliciter* plus mind *simpliciter*) is the radix of my reading and comprehension: namely, my tonic and intentional mindbody.

I do not make this claim because I think that, even though true, it is not obviously true, is therefore likely to be controversial, and thus needs another champion. Nor do I suppose that it is likely to be denied. I make it rather because I believe it is both true and important and should be taken up into our accounts of *how* we know and do what we know and do; and because the regnant accounts have, by suggesting otherwise, inflicted a deep and possibly mortal wound upon our imaginations.

Now of course I am aware of none of these elements and options prior to reflection, that is, in the warp and weave of my first-order activity of actually reading and comprehending. And that immediacy is fractured by the elicitation in reflection of the elements that seem to be involved. Yet it is intuitively clear to me that *my* reflected account of reading and comprehending is closer to the unreflected actuality than is the account of the intellectualist. And if you rejoin: "But how can you know this?" I shall be hard pressed to say. However, this pressure will in no wise weaken my intuitive certainty.

Nor is this intuitive certainty without further import. It is the ground of

my certainty, even within the seamless warp and weave of my unreflected first-order act of reading the words 'mobilized toward reality.' Described in as direct a way as possible, these words get a grip upon my tonic, sentient, and oriented mindbody. It tacitly incorporates them into itself, even though I do not explicitly know of it as it does so.

None of these disclosures could alter by so much as a jot the ways in which we have in fact always read and comprehended our native language or the ways in which we have learned it. What is in dispute here are alternative second-order accounts of these first-order activities. But the second-order accounts are not without certain indeterminate consequences for our imaginative picture of man's place in the universe. Otherwise there would not have been, for example, an increasing tendency among my students during the last thirty years to describe their own intellectual process, in the most offhand and matter-of-fact way, as computer-like—a tendency exactly paralleling the increased currency within the general culture of the jargon of computer technology.

If then, *prima facie*, the putatively highly and mainly "intellectual" feat of reading begins to appear to be performed by the *integral mindbody* rather than by the mind *simpliciter*, then a fortiori all activities graded below reading in a hierarchy of "intellectual" skills must begin to appear themselves to be grounded in the integral mindbody. And this may cause us to examine such putatively "abstract" and "intellectual" feats as arithmetical calculation and the formal drawing of logical inferences in accordance with explicit rules. Could it be that even these activities are *mindbodily* ones, rather than just *mental* ones?

But let us return once again to the text from Church. We read "[perception as] *participation*, where we respond organismically in an *unmediated, reflex-like* way to the dynamic, affective, physiognomic properties of the environment" (all emphases are mine). With the italicized words especially I find that their very *meaning* for me depends upon their having got a palpable grip upon my tonic mindbody and, in an entirely straightforward sense, upon my having incorporated them into my mindbody in the style appropriate to each word. This may conceivably sound outrageous. Would it seem equally so, if I were to say: "In rehearsal the choreographer moved though the moving shapes of the ballet to the beat of the music; and as he did so the members of the corps de ballet began to incorporate them into their own bodies"? 'Participation' is a word that I am able to incorporate because of the absolutely primitive part-whole opposition grounded in the given, unreflected, prelingual integrity and natural gestalt of my tonic,

sentiently oriented, and motile mindbody. I can pour myself into something *other* than my mindbody, as when I integrate a hammer to my hand and wield it, because antecedently and primordially I have been able to “pour” myself into my own arm. ‘Organismically’ is also a word that I immediately incorporate because form, wholeness, meaning, hence organism are the very modalities of my being in the world long before I have words or concepts to embody, therefore, reflectively to know of these. What’s more, my very *choice* in the preceding sentence of the word ‘immediately’ in the expression ‘immediately incorporate’ issued from an unreflected mindbodily feel for its appositeness to this context. Even more therefore does my grasp of its *meaning* depend upon the word’s grip upon my tonic mindbody and upon my mindbody’s virtual incorporation of it when I read the sentence over.

Once again turning to the words of Church, he says that in contrast to perception as participation, there is “contemplative perception, where *action is suspended*” (emphasis mine). How but by relying immediately and mindbodily upon my primitive sense of the contrasts between “motion” and “rest,” “activity” and “passivity,” which I “know” long before I have words or concepts to embody this “knowledge,” am I able to understand their meaning in the setting of the whole? And we can now turn the passage from Church back upon itself. We may say: It is only because I simultaneously rely mindbodily upon the contemporary actuality *for me* of my unmediated *participation* in the passage and the contemporary actuality *for me* of my mediated *contemplative perception* of his words that there can exist *for me* the mindbodily modality within which there might *arise* a distinction between perception as *participation* and perception as *contemplation*.

The import of this last claim—which I take to be central to my argument—is easily overlooked or ignored: *overlooked* because it is addressed to the being of a reader at a level of his own depth not readily reached in a vision-dominated culture where, for example, speedreading is more and more the model of our relation to the written word; *ignored* because the claim, contemplated with detachment, appears to be and in fact is embarrassingly obvious. What needs to happen is that we take this import with philosophic seriousness in our accounts of knowing/doing, for it comes to this: in absolutely every single act of integration, comprehension, and meaning-discernment my being as a totality—mind and body, mindbody—is actively engaged. I have been able at the beginning to learn mathematical computation and the drawing of inferences according to

formal rules only because I was *mindbodily* engaged in this activity. And in the present I draw inferences and compute only by being mindbodily so engaged.

It is such intuitively “known,” prereflectively given “facts” as these¹¹ (as I hold them to be) that have led me to make a number of claims earlier in these meditations.

For example, in puzzling over some of the perplexities arising from Polanyi’s heterodox uses of logical terms, I was led to infer that we should be entitled by his conceptual innovations to say things such as “muscles make assumptions”; that we might legitimately think of the component particulars of a motor skill as standing in “logical” relations with one another. From this, I went on to conclude that it is the logico-epistemological sense of ‘assumption,’ the sense, namely, of the philosophic tradition. that is *derivative*; while it is the mindbodily sense that is radical, the sense that our mindbodies are the ultimate “logical” ground and condition for us, the “logical” matrix in which the derived, logico-epistemological sense is rooted and from whose own intentional logic they have their meaning; that in other words our formal, reversible logic is in fact reflected out of our mindbodies and hence that concepts like ‘cause’ and ‘imply’ could mean nothing to us, were we not, *anterior to their explicitation in our acts of reflection*, motile and oriented mindbodies in the world.

These reflections led me naturally to conclude that the “biographies” of the mindbodily unity of each of us are rooted (no less than in the grammatical and syntactical hierarchies of language and speech) in a hierarchy of forms, structures, orders, systems which are more ancient than our reflective intelligence; that there is in our prereflective and unreflecting mindbodies an archaic prejudice toward form, meaning, and order.

It was by reason of these sorts of “facts,” too, that I was led to declare that the very “logical” *condition* for the devising of empirical experiments by Piaget, leading to his claim that logico-mathematical reasoning emerges from our earliest sensorimotor behavior, was *his own* antecedent reliance upon his unreflected mindbodily being with its sensed primitive sensorimotoric rootedness of this connection.

It was in view also of these facts that I said that our language has the sinews of our bodies which had them first; that its grammar, syntax, meaning, and metaphorical and semantical intentionality are preformed in the “grammar,” “syntax,” “meaning,” and “metaphorical” and “semantical” intentionality of our prelingual mindbodily being which are their conditions. And it was also in view of these facts that I was led to claim that language is

structured *upon* and therefore structured *like* our sentiently oriented and motile mindbodies.

Further cognate “facts,” discovered while suggesting an explanation for and an unpacking of the import of Augustine’s claim to know more than he could tell—that is, to know what time is “when no one asketh”—led me to assert that the phylogenetic and ontogenetic antiquity and radicalness of our “knowledge” of the “temporality” and “intentionality” of our mindbodily being lie hidden for reflection (“If I wish to explain it to one that asketh, I know not”) in the very tendons of our language. These facts led me to say also that the temporality of our being appears and is “known” as the from-to structure of the tonicity of our mindbodies; to say that these are modulated into the “temporality” apart from which words like ‘tense,’ ‘attend,’ ‘tenter,’ and ‘portent’ would resonate with nothing; and, finally, to say that we carry this “temporal” *arché* about in the sinews of our language and in the sinews of our mindbodies which had them first.

“Facts” such as those alluded to above led me, when I was discussing the difficulties of conceiving absolute contingency, to say that its meaning *as* absolute contingency, *as* random occurrence, *as* radical novelty, even just as oppugnant *other-than*, arises only against the background of and is therefore parasitical upon the antecedently given and irreducible meaning and intentionality of the mindbody.

These same “facts,” which are primitively and intuitively “known” to me, led me to claim that ‘form,’ ‘whole,’ and ‘meaning,’ as they appear in reflection, presuppose themselves prereflectively; even as I was led to say that *meaning is radical, irreducible, older than reflection*; and that our tonic mindbodies, resonating with the metaphorical intentionalities by which they are environed, embody it and bring it forth.

I have said that the most archaic sense we have of ‘form,’ ‘whole,’ and ‘meaning’ is grounded in the given, unreflected and prelingual integrity and natural gestalt of our tonic, sentiently oriented and motile mindbodies, taken in and of themselves in their interpersonal and convivial setting; that we primitively and immediately “know” form, wholeness, and meaning as the *very existential modalities* of our being in the world *long before we have words or concepts to embody this “knowledge”*; that indeed this “knowledge” is the condition sine qua non of our very power to generate words or concepts. If this is the case, then it will be at once the most important truth about ourselves as speaking animals and the most difficult one to express and vindicate, lying as it would beyond the reach of any but the most involute and reflexive language and therefore beyond the reach of

argument in any of its familiar senses. Yet making this case by some means or other, should it be possible, would serve to overcome reflectively the dualism of minds and bodies without reductionism in either direction. Language here will have to be allusive and reflexive upon our own mindbodily roots; argument will have to induce in the reader a novel angle of vision upon his situation as a speaking animal in the world by means of language used in this way.

If these "facts" which I claim to "know" immediately by means of a reflexive phenomenology upon my existent mindbody were not grounded in our phylogenetic history, there to become known from the standpoint of natural history, theory of evolution, and emergence as the successive stages and "logical" grounds for their availability to a reflexive phenomenology, we should not as a species have acquired our so-called higher powers—in particular our powers of speech. Had these "facts" not been achieved and instantiated in my own ontogenetic recapitulation of phylogeny, then the "logical" grounds for the emergence of these powers and of my present and actual existential reliance upon them in the reading of a text would have been impossible. To be more concrete, if I were not the kind of being who *could* "know" form, wholeness, and meaning in some immediate sense as the very modalities of my being in the world long before I have words or concepts to embody this "knowledge"; and if I were not to actualize this "knowledge" in my own being by relying upon it as the logical ground of the generation of words or concepts; then I should never become a speaking animal. I can say this because the sense I make of the world, the orientation I achieve in it, the meanings and gestalten I grasp, are made, achieved, and grasped most of the time without relying upon language and the instruments of reflection, not only *before* the acquisition of language, but *after* it—and all this I "know."

Let the reader be as clear as possible as to the standpoint of this assertion. It is my intention, as a matter of methodological principle, to avoid any alienation from the existential actuality of my own mindbodily being, here and now, in its acts of reflection upon the roots of its own reflection, which would perhaps carry me away toward the "natural standpoint" of modern common sense. This I aspire to do since I wish, so far as possible, to allow myself to resonate with the actuality of my own existent mindbody in its acts of reflecting upon reflection *from the inside* rather than to reflect detachedly upon the manifestations of bodiliness, sentience, orientation, and intelligence as they appear within the conceptual matrix of modern common sense—or within the second-order accounts of, say, physiology,

psychology, or the epistemology of much of the tradition. For I do not wish to be systematically caused by my methodology to forget that *I am myself one who, in the very act of reflecting, is already and always at the existential center of his own bodiliness, sentience, orientation, and intelligence*—in short, an actually existent mindbody fully enfleshed and embrangled in the activity of reflecting, as I have been in the act of “conceiving,” writing down, and proofing what you have just read.

These claims, I have said, have forced themselves upon me intuitively as I have attempted in these meditations to practice this method upon my own contemporary acts of reflection and upon my analysis of the way in which I contemporaneously read the text of Church by (even now) relying upon, *as logical grounds*, my own ontogenetic history, its stages, and their hierarchy. On its face this appears to amount to asserting the truism that the intuitive certainty I have is of my reliance, *from within*, upon my mindbody, its history, and its formal integrity *in every contemporary act of the comprehension of meaning*. And this it indeed is—but it is a truism, as I have claimed, that must be taken seriously in our accounts of our modes of being and knowing.

What I am claiming then is not just a variation upon Polanyi’s doctrine of logical levels or ontological hierarchies. The ontology implicit in the analysis that derives from my method of reflexive phenomenology is a phenomenological ontology: an ontology, that is to say, deriving from the structure I claim to find first of all and, in a sense, nowhere else than in an involute and reflexive inspection of thought and being, the ground and center of which I seek to insure will remain my *own* ground and being as I am in my very act of reflecting.

Polanyi for example makes the distinction between the physical-chemical laws that govern the behavior of the particulars of a machine in themselves qua mere physical-chemical entities and the operational principles of machines that govern them *insofar as they are parts of a machine*, having a design imposed by man upon inanimate matter, directed toward some specific *telos*. He invokes the principle of boundary conditions to explain how this may be. He says: “The machine as a whole works under the control of two distinct principles. The higher one is the principle of the machine’s design [operational principles], and harnesses the lower one, which consists in the physical-chemical processes on the operation of which the machine relies.”¹²

This principle of dual control is possible because, for example, the laws of physics and chemistry may be bound by the control of the operational

principles of machines. In designing a machine according to the operational principles of machines one *binds* in a certain way their particulars, which in themselves are subject to only physical-chemical laws. This being so, you cannot explain how a machine *succeeds* in achieving its *telos* by appealing only to physical-chemical laws, since in an exhaustively physical-chemical universe there would be no machines, even less successful ones. However, you can explain why a machine *fails* of achieving its *telos* in physical-chemical terms, since the machine (a physical-chemical entity bound by the operational principles of machines) relies upon the continued integrity of its physical-chemical parts in themselves. If therefore a physical-chemical part, subject, indeed precisely in *obedience* to the physical-chemical laws that govern it, in itself undergoes a transformation—let us say that it melts—then the machine will of course break down.

In *The Tacit Dimension* Polanyi illustrates the theory of hierarchies, logical levels and emergence with the case of one giving a speech. Giving a speech includes, he says, five levels: “the production (1) of voice, (2) of words, (3) of sentences, (4) of style, and (5) of literary composition. Each of these levels is subject to its own laws as prescribed (1) by phonetics, (2) by lexicography, (3) by grammar, (4) by stylistics, and (5) by literary criticism” (*T.D.*, p. 35).

In speaking thus of what we all know in actuality to be a complex but seamless, though temporally distended, intentional motif, I do not for a moment imagine Polanyi to suppose that in giving a speech I mobilize my vocal apparatus to produce vocal sound of some indeterminate sort; that I then choose words; that then, attending to the words themselves, I form sentences of them; that sentences before me, as it were, I then consider how to impose a style upon them; and that, finally, I subordinate all of these to some more comprehensive literary form—even though his language here may tempt us into this misconstruction. Even less am I suggesting that he supposes that at each stage in the process, described as above, we consult the explicated laws of phonetics, lexicography, grammar, stylistics, and literary criticism in order to perform the integration of each level with the next higher level. Polanyi’s whole argument to the reality and ubiquity of tacit knowledge is of course expressly designed to impeach any such account of our integrated acts of knowing and being. Nor, obviously, does he mean to imply that you could teach a person to speak—even less that you could teach him to “make a speech”—by detailing to him the “levels” of a speech that can be distinguished by means of our reflective instruments; by sketching out for him the hierarchy of sets of laws or

principles that for reflection are discernibly operative at each such level. Nor, finally, am I scrutinizing Polanyi's theory of levels and emergence as an ontological doctrine, though I do not believe it is beyond criticism.

Rather what I wish to do here is to contrast *as a method* what I have been calling a reflexive phenomenology performed upon my own existent mindbody, embrangled in its own acts of reflection—about which I claim to be clear—with Polanyi's method which, to take the analysis of making a speech as example, proceeds *explicitly* from the premises of the relative detachment of the natural standpoint of modern common sense, explicitly invoking categories such as phonetics, lexicography, grammar, voice production, and the like to formulate a theory of being, while at the same time he is relying *tacitly* upon his own immediate and contemporary appreciation of the *roots in his own mindbody of these levels and hierarchies*. And I shall want to suggest, and I have earlier in discussing Polanyi's extensive though unwitting innovations with concepts, that the fact of this tacit appreciation is implied by his willingness to use these terms to describe the nature of the relations of our mindbodies to what they are knowing/doing, even when the "logical" relations of "assuming" or "affirming," "believing" or "premising," "valuing" or "acting according to rules," are unreflected—even when their relations are, in short, grounded in the very modalities of our existence as integral mindbodies *apart from and as the ceaseless background and ontological/logical condition* of reflection. Polanyi relies upon his contemporary tacit appreciation of the logic of his own mindbody to a degree all but unknown in the philosophic tradition; while reflecting he is kept unreflectingly in touch with his own personal existence *through the medium of the metaphorical intentionalities of the language he uses*. It is this fact that moves him, but not always wittingly so, to institute these conceptual innovations. If this is indeed the case, I can then say that while my *explicit* reflexive phenomenology is more radical than Polanyi's *explicit* method, my method is tacitly implied in the metaphorical intentionalities of the language of *Personal Knowledge* throughout. Occasionally it even becomes explicit, most conspicuously and powerfully when Polanyi says: "We can voice our ultimate convictions only from within our convictions—from within the whole system of [mindbodily] acceptances that are logically prior to any particular assertion of our own, prior to the holding of any particular piece of knowledge" (*P.K.*, p. 267). He then, significantly, shifts from the first person, nominative case, plural to the first person singular as he continues: "If an ultimate logical level is to be attained and made explicit, this must be a declaration of my personal beliefs [believings]."

I believe that the function of philosophic reflection consists in bringing to light and affirming *as my own*, the beliefs implied in such of my thoughts *and practice* [mindbodily ways of being in the world, including *unreflecting* ways of being] as I believe to be valid; that I must aim at discovering what I truly believe in and at formulating the convictions which *I find myself holding*" (P.K., p. 267; emphasis added).

What then am I led to claim as the outcome of this inquiry, guided by this method? First I claim that there are "hierarchies," "orders," "forms," "meanings" that we tacitly "know" mindbodily because we are alive, we move, are sentient and oriented; and that these are "epistemologically" archaic and radical compared to the derived, reflected hierarchy of the physical-chemical, the biotic, the sentient, the intellectual, the moral, the cultural, the religious, and to the laws or principles that apply to each level in itself. Second I claim that these archaic and usually unreflected hierarchies, forms, and meanings may be said to stand in *logical* (no less than temporal) relations with one another, even as, following what I claimed to be the import of Polanyi's argument, I held that there are such relations among our unreflected mindbodily "assumptions" and our articulated ones, between the *embodied sense* of 'cause' and 'imply' and our reflected concepts of these. Third I claim that we rely mindbodily upon our reflected and immediate sense of these forms and hierarchies *before* we speak and exercise intelligence—in that sense of 'intelligence' affiliated with the use of language and reflection. Such a reliance is analogously manifest in the sense of orientation found among more primitive forms of living things. It is found among ourselves, both before we acquire language and, in a qualified sense, independent of language after it has been acquired. Finally I claim that we "know" intuitively and unreflectively of the "logical" relations among these hierarchies, forms, and meanings before we have concepts or words for them in a way analogous to that in which we grasp the logic of Bach's melody C, E, G, C/E, G, C, wherein the C, E, G, C pretends the E, G, C and E, G, C retrotends the C, E, G, C.

Earlier, of a passage from *Language and the Discovery of Reality* that struck me as a model of lucidity and that I understood immediately, I wondered: how did I ever learn to understand it; how do I actually do so on the occasion of a particular reading? I drew there, inter alia, the hardly controversial conclusion that, if we are able to learn language, we shall have to be the sorts of preverbal organisms for whom this is a possibility. Yet I wished to give an account of us as preverbal potential language learners that is neither downwardly reductionistic, as is that of B. F. Skinner, nor

upwardly reductionistic as is that of Noam Chomsky. What I have just concluded from my reflexive phenomenological analysis bears upon this question as follows: if there were not in the very shape and rhythm of our preverbal mindbodily existence this primitive and tacit sense of form, whole, and meaning, there could never be for us in our verbalized, mindbodily existence a reality upon which the concepts 'form,' 'whole,' or 'meaning' might come to bear. Joseph Church has said all of this with such straightforward ingenuousness that its profound import may easily be overlooked. He says:

We assume, that words are not simple abstract forms that impinge upon [the language-acquiring child] from without, but that they reverberate in him and arouse him to at least partial mobilization. . . . We cannot understand how language gets from outside the child to inside unless it is in some way inside from the beginning; we cannot understand how passive language becomes active language unless it is always to some extent active.¹³

The philosophical tradition, when it sought to acknowledge that language must indeed be "inside the child from the beginning," incapable of approaching the problem developmentally within the terms of the regnant static picture of knowledge, could only conjecture that what was "inside" from the beginning was innate ideas, certain "mental" entities waiting, unchanged and essentially unchangeable, to be let out. Or, alternatively, in some form or another of materialism, it really did away with the basis upon which we could draw the distinction between "inside the child" and "outside the child," thereby trading in a philosophical puzzle about language for a massive incoherence.

It is of some considerable interest that recent empirical studies of language learning among human infants support these conclusions¹⁴—though, let it be remembered, these investigators could have generated the hypothesis that the *form* of the patterned sound of human speech and the *form* of the motility of preverbal human infants are connatural with one another *only by relying upon a more primitive intuition from within their mindbodies* of the consanguinity of their own motility and sentience, their own speaking/hearing, and their own sense of meaning.

Roger Lewin, editor of *Child Alive*, says in his introduction:

The development of social interaction—through touching, breast-feeding, and eye-to-eye contact—begins at birth. The newborn baby

displays inbuilt rhythms—in dreaming and sucking behavior for instance—and these soon expand into direct social contact through visual and vocal signaling. The inbuilt rhythms are prelude to intentional and deliberate signaling by the baby.¹⁵

In “Early Attempts at Speech,” from which I shall quote extensively, Colwyn Trevarthen says:¹⁶

A discovery of major importance is that the basic pacemakers of attending and intending movements in infants operate at frequencies in time that are the same as those of adults. . . . As the person approaches the infant . . . then all the emanations from this approach have rhythmical properties that are comparable with those inside the movement-generating mechanism of the infant’s brain. From this correspondence I believe the infant builds a bridge to persons.¹⁷

Trevarthen, with Penelope Hubley and Lynne Murray, has made films at Edinburgh that reveal that

the acts of two-month-olds responding to attentions of elder persons outline many psychological processes of talking between adults. We have found activity which is best called “prespeech” because both the context in which it occurs and its form indicate that it is a rudimentary form of speaking by movements of lips and tongue. . . . We note a specific pattern of breathing with prespeech even when sounds are not made.¹⁸ . . . Also associated with prespeech are distinctive ‘hand-waving’ movements that are developmentally related to the gestures or gesticulations of adults in “eager” and “graphic” conversation.¹⁹

Most striking of all, perhaps, Trevarthen suggests that

changes that all unaffected mothers make to slower, more emphatic but gentle movements and to “baby talk” may come from *a return of the mother to more elementary or basic components in her innate repertoire of social arts*.²⁰

Of course! We are able to talk to babies because our own babyhood (*pace*, Descartes) is always contemporaneously with us! Again, it is embarrassing to have to make much of this point in philosophical argument, since we all know it quite well.

Finally, in an essay, “Speech Makes Babies Move,”²¹ William Condon concludes:

that the neonate *moves synchronously with adult speech as early as the first day after birth.*²²

Having worked out a device for relating units of body motion to units of speech in experiments with film, Condon was able to observe that

microanalysis led me to the startling observation . . . that a listener moves synchronously with a speaker during interaction. This is usually a completely "unconscious" reaction. It seems to be a form of precise and almost simultaneous entrainment on the part of the listener in relation to the emergent articulatory patterning of the speaker's speech.²³

Later he says:

There is an ongoing isomorphism or entrainment between the listener's process units and the speaker's speech. It is like an intricate and subtle dance which is always occurring during interactions.²⁴

By way of summarizing his experimental findings, Condon says:

It appears, then, that interactional synchrony begins as early as the first few hours after birth and may exist even earlier. If the infant, from the beginning, moves in such precise, shared rhythm with the organization of the speech structure of his culture, then he participates developmentally (through complex, sociobiological entrainment processes) in literally millions of repetitions of linguistic forms long before he will use them in speaking and communicating. By the time he begins to speak he may have already laid down within himself the form and structure of the language system of his culture. This would encompass a multiplicity of interlocking aspects; rhythmic and syntactic "hierarchies," pitch and stress patterns, paralinguistic nuances, not to mention body motion styles and rhythms.²⁵

Though, as I have suggested, it was possible to conceive these empirical studies at all only because the investigators were able to rely upon a more radical "epistemological" bedrock in their own mindbodies to generate the very hypothesis that governs the course of their inquiry, it is telling that they elaborately confirm what commonsensically we *already know would have to be the case* if we were to be able to do what most of us do routinely and very early: viz., learn our native language.

And why do the antithetical theories of Skinner and Chomsky, which on

their face seem so remote from common sense, hold their progenitors and us in such profound thrall that a dialectic as involuted as the one I have been practicing here seems required to set us free? Because of the picture of our knowing and doing that they and we both *have* and are *in the midst of* and that is shaped in the metaphorical intentionalities of our language.

XII

In the light of the summary of claims made above, with the support for some of them afforded by “empirical” research into the language learning of infants, it is useful to double back yet again.

Still earlier I have held that sentient movement, gesture, and fully articulated verbal language—even the language of mathematics and symbolic logic—are connatural; and that the most archaic sense we have of ‘form,’ ‘whole,’ and ‘meaning’ is grounded in the unreflected integrity and natural gestalt of our tonic mindbodies. Now we need to look once again at the difficult passage from page 191 of *Personal Knowledge* to see whether a profounder sense of it and its implications can be disclosed in the light of these enlarged claims. There, you will remember, Polanyi asserts:

Our acceptance of what is logically anterior is based on our prior acceptance of what is logically derivative, as being implied in our acceptance of the latter.

What does this mean? Exegeting it earlier with the aid of a musical model for logical relations, I said, putting it now in the first person, that for my temporally attenuated tonic mindbody this passage means that any of its given believings and evaluings *pretend* themselves as explicitable and *retrotend* themselves as hitherto tacit. But this we found to be rather too cryptic to be of help. We are now better prepared to enlarge upon this. Can we not now say that the passage means: I *now* accept a reflected formulation of my hitherto *tacit* believings, *after the fact of my having relied upon them* as the (logical/ontological) grounds of my coming to achieve my presently *explicit* beliefs, because now I have come to see *these* believings to be implied in my presently achieved explicit beliefs. This awkward-seeming to and fro of the language first of the explicit and then of the tacit in

accounts of my feats of knowing is required to express the density of the tonic interaction of reflection and the reflected with all that is unreflected and of their continual exchange of status in the plexuses of motifs of my mindbodily life. And there is really no escape from this. This awkwardness is necessary, if I am to describe my knowings as attenuated in time, rather than presenting them as if they were already accomplished facts, architectonically arrayed in a timeless instant.

Let it therefore be noted: this “logical” connection between the tacit and the explicit cannot be expressed in a formalism in which the terms are logically (and temporally) homogeneous. Consequently it cannot be known in the way in which I may be said to know that P implies Q , when I read $P \rightarrow Q$ meaning “ P implies Q ” in a conventional formalism of logic, conceived as the statement of an atemporal (eternal) relation. P and Q are both *logically* (in the familiar sense) and *temporally* homogeneous: P as (logical) antecedent and Q as (logical) consequent have the same (logical) value—they occupy, so to speak, the same logical space; and the relation of “implying” and “being the implication of” holding between P and Q is an atemporal (that is, in the conventional terms, a *strictly* logical) one. Whereas, on the contrary, my *tacit* believings and my *explicit* believings, while indeed having a *logical* relation to one another—as we have seen—are intentionally related, hence attenuated within time. As we have seen, too, *within the motif* comprised of the musical notes C, E, G, C/E, G, C, even though we may say that *within this musical motif* the first group of notes implies the second and that the second group is the implicate of the first, and that, therefore, they stand *within this motif* in a logical relation with one another, we nevertheless clearly understand that a genuinely temporal relation is intrinsic to each note’s being what it is in itself and to their being, taken together, the *motif* that they are.

In hearing the musical motif C, E, G, C/E, G, C, I may be said to *know* that the first group of notes is both logically and temporally anterior to the second, that the second is logically and temporally posterior to the first. But this knowledge I have, while I am unreflectingly hearing the motif, is *tacit*. It is possible for me to claim to know this in full explicitness only through reflecting upon the formalism of a musical notation. Yet here, in contradistinction to the formalism of a logical notation (conventionally understood), the *logical* relation between the notes C, E, G, C and E, G, C as the motif scored by J. S. Bach is complemented by the *equally formal* expression of their *temporal* relation. This last is achieved in the musical formalism by the indication of a time signature such as $3/4$, $4/8$, $6/4$,

which show respectively that there are three, four, and six beats to a measure and that a quarter, eighth, and quarter note respectively will receive one beat, and also by means of tempo indicators such as an assigned numerical metronomic value or verbal directives such as *andante*, *allegro di molto*, *accelerando*, *poco ritardando*.

However, even though musical formalisms are such that they at once express and embody logical and temporal relations among the particulars that jointly comprise a musical motif, it should not be assumed that there can be embodied explicitly and exhaustively in the formalism of the musical score *everything* necessary to endow it, *in itself* as a *formalism*, with meaning. Merleau-Ponty has said: "Language [any formalism] is . . . neither a self nor a thing. . . . [It] is neither thing nor mind." Wittgenstein has said: "The meaning of a word is its use in the language. . . . Every sign *by itself* seems dead. *What* gives it life?—In use it is *alive*. Is life breathed into it there?—Or is the use its life?" Earlier I have said: "Spirit and letter are at once indissolubly bonded and irreducibly oppugnant." All of this, of course, is crushingly obvious; yet we should not underestimate the grip upon us of this form of language realism, its power to make us forget that meaning cannot be alienated from ourselves, conveyed to a formalism from the indissolubility and oppugnancy of letter and spirit, be that formalism ever so intricate, which by itself is dead. Therefore it needs to be said: it is only because I always bring to the musical formalism the tacit *sense* possessed by my archaic mindbody of the "hanging togetherness" of things, which, in the first instance, is the "hanging togetherness" of my integral mindbody itself, that the formalism, mute in itself, can supply the *meaning* of, let us say, *relation*—either *temporal* or *logical* (in both the conventional and now in the musical sense).

In order to make this self-evident argument seem more significant philosophically, let us imagine the following case. Once there was a man who became such a compulsive reader that he lost all touch with his own mindbody. The time came when the world was nothing for him except his eyes, like discarnate lenses, and a given page of printed text. He pursued his interest of concentrating with ever greater exigency upon just what was before his eyes on a page. One day, to his great alarm, having spent some time examining what he found to be the interesting ways in which *letters* are joined to form *words*, he discovered that he could no longer recognize a sentence; even less could he comprehend the stories formed by sentences that before had always been his chief delight. He would have been spared this painful discovery had he but remained strictly with his texts: he would

have had no sense of having sustained a loss, and thus would have had no occasion for grief. What's more, he might well have lived to become a Distinguished University Professor and received a large grant from the National Endowment for the Humanities to report at length upon the discoveries he had made, isolated in his cell.

However, from time to time he did leave his scholar's cubicle to converse with a neighbor in an adjoining carrel. In these conversations, perhaps in spite of himself, he found that he was confronted mindbodily by the mindbody of an *other*.

He heard the voice, observed the animated facial expressions and gesticulations of this *other*; even found himself curiously "caught up" with him. On these occasions he of course paid no attention to words or even sentences *as such*; even less did he concern himself with the way words are formed of letters. He spoke and listened and understood! Quite acritically and unreflectingly; even with excitement and pleasure.

After one such conversation, however, returning to his cubicle and his texts, he suddenly remembered that there had been a time when he was able to *see* and *comprehend sentences* in his text, in the isolation of his cubicle, no less than to *see* and *comprehend* the words before him formed of letters. Whereas now while he comprehended words well enough—that is, 'word' was for him 'word' and not w.o.r.d., he could no longer comprehend anything of which words were the parts as letters are the parts of words.

How could such a man recover himself? Clearly, in a *written medium* there could be no foothold for a written formal rule by following which he could then come to "derive" sentences from words. Such a written rule would now be quite as incomprehensible to him as the stories that he had once enjoyed but could no longer grasp. Furthermore, sentences do not "derive" from words any more than machines "derive" from physical-chemical entities. Giving him a written maxim then would be quite useless. It would serve to confirm the pathology's diagnosis, but could in no wise serve as a cure.

Since however we know that he is quite capable of comprehending sentences as he *hears* them, the indicated therapy would have to be administered orally, or oral-aurally. We should have to *tell* him, in the setting of the lively, convivial, and mindbodily oral-aural reciprocity, that comprehending *written* sentences is rather like listening to and grasping the temporal attenuation of a *spoken* sentence or the logic of a *played melody*. Indeed we could say that it is rather like the practice of that skill a remnant of which

still remains to him, namely, the skill by which he *comprehends a word by relying upon its letters*. In other words we should have to try, in the setting of the oral-aural reciprocity, to put him back in touch with his own temporally distended tonic mindbody—with, that is, the *matrix of all meaning*.

Or imagine a man who is note-sensitive, but melody-deaf; that is, he can hear individual notes quite well, but melodies do not exist for him. Could an explicit rule be formulated so that, if he obeyed it strictly, he could become melody-sensitive? Let us say that the musical score for Bach's *Well-Tempered Clavier* is handed to him. It is precisely the logic of this musical motif that does not and cannot exist for him. This is his pathology. The notes C, E, G, C he hears quite as well as you and I. It is the organizing logic of the melody that does not exist for him. As you and I read the formalism of the musical score, we may well, seeing the notes C, E, G, C on the musical staff, hear in imagination the first phrase of the First Prelude. We cannot even imagine what our melody-deaf man would imagine.

If the logic of the musical motif as we mindbodily hear it does not inhere of itself in the musical formalism except we bring its *musical* life to it, *no* formalism by itself can serve to induce melody sensitivity in this man. If the *melodic* connection among C, E, G, C and E, G, C is not tacitly supplied by his tonic mindbody—itsself being melodic by virtue of its intentionality, under the suasions of its intellectual passions—then an *explicit* formalism that could show this to you and to me could not be understood by him any better than melodies can be understood by him.

The temptation here is to say: what is true for the relation between a musical formalism and our comprehension of musical motifs need not hold for the, no doubt, analogous but also importantly disanalogous case of the formal system of language. The lure of language realism gets its traction with us here because of another picture. Written or printed sentences in English contain verbs, hence have tenses, therefore embody *time* in their formalism as such. Yet the words that they contain as *written or printed objects on a page* are simultaneously co-present with one another in (visual) space as the sounded words of lively speech or the sounded notes of melody are not. We may therefore readily be misled by this disanalogy into supposing that the “logical” connection of one word with another in a printed sentence—embodied in the formalism of grammatical, syntactical, and semantical rules—is an atemporal, hence eternal one; and therefore that the *comprehension* of this connection—even though, to be sure, reading takes time—exists in an atemporal instant for our (discarnate) *minds* and therefore does not depend upon the temporal attenuation of our tonic *mindbodies*.

Captivity to this same picture leads Chomsky to draw at the point he does the fatal distinction between linguistic competence and linguistic performance. This leads in turn to the distinction between an *ideal* speaker-hearer of language and an *actual* speaker-hearer, subject to all the contingent factors that may enter into and, perhaps, impede his actual ability to form and comprehend sentences. The ideal speaker-hearer—which of course is a complete abstraction from the mindbodily being in the world with other speaker-hearers—“exhibits competence” insofar as he “speaks” and “understands,” according to putatively “internalized” rules of a deep grammar. Of course, he can in fact do neither of these, not being an existent, tonic mindbody. The *actual* speaker-hearer’s performance reflects his competence, but it also depends upon many other factors having no importance from the point of view of Chomskyan linguistics. And it is important to remember that the ideal speaker-hearer neither *speaks* nor *hears*: not just *actually* does not, but logically could not. It can only embody *competence*, having “internalized” deep grammatical rules from which sentences are generated. The ideal speaker-hearer is in fact a computer into which, *per impossible*, a deep grammar that is “unbounded in scope and stimulus-free” has been programmed and that can print out, but not speak, novel grammatical sentences.

We are misled here, then, because a language that we encounter in print tends to alienate us by abstraction from its actual dependence upon our intentional mindbodies. The lively speech-act in the oral-aural reciprocity occasions no such alienation, since it is intimately bound to, dependent for its meaning upon, and consanguine with its own gestural ambience.

No rule in a written formalism could enable a man sensitive to printed words but blind to sentences to become sentence-sensitive, if this sensitivity were not already tacitly portended in his mindbodily integrity.

All that has been said above concerning a printed sentence in English holds *mutatis mutandis* for a proposition in a logical calculus or one in a mathematical notation—except that in these last alienation by abstraction from our existent mindbodily being will have progressed to the ultimate extreme imaginable.

It is embarrassing for me to have to write and of course a weariness for you to have yet again to read such a truism. However, thirty years of trying to make this obvious point so that it could be interiorized by students persuades me that it must be said: our lively mindbodies are the omnipresent, radically inalienable, and logically necessary matrix within which all our acts of meaning-discernment are conceived and brought to

term, *no matter how abstracted from this matrix are the vectors by which these acts are borne*. The vectorial arc of radical meaning moves like music through our mindbodily integrity—the form, wholeness, and meaning of its natural gestalt, in time issuing in the words ‘form,’ ‘whole,’ and ‘meaning.’ It moves through our motility, itself expressive of our mode of being in the world, through gesture, song, dance, and lively speech, protending, finally, the most abstract articulations of logical calculi and mathematics and that upon which it bears—even that yet to be conceived.

Polanyi says: “A game of chess creates its own pleasures, but could not do so if babies could not play with rattles . . . the emotional life engendered by an articulate culture is . . . primordially rooted in the emotions of inarticulate creatures . . . the exhilaration shown by apes and babies when solving a problem prefigures the intellectual joys of science” (*P.K.*, p. 194).

Of course. It could not *be* otherwise. Yet that it could not is, for reflection, the most forgettable of things, and for reflection, when once it is remembered, is only reflexively expressible.

None of us seriously doubts the independent existence of a real world, unless perhaps we are subject, for a passing hour or for a lifetime, to some pathology. This claim appears to beg many questions and not only those posed by the philosophically inclined. We are all given to raising questions that are not so much abstract philosophical as existential. These well up out of our own lives and cause us to wonder: Is the life I am now living real? Do I actually appear to others as who I am in the things I say and do? Do I even appear so to myself? No doubt the abstractly philosophical questions do arise out of this kind of solipsism, which can’t be *said*, but which does “show” itself; and perhaps only the most brutalized human being could be imagined as incapable of framing these questions to himself. However, all of these last sorts of query are preeminently axiological: they are questions having to do with what is at bedrock valuable and meaningful to us, as opposed to what is less so. Therefore they are usually not expressing skepticism about the reality of a world that stands among men and is a setting for some form of common life and possesses incorrigibility—however various may be the views as to what this world is like. The indicative mood is indeed radical, upon which the subjunctive is parasitical, because it is grounded in the intentionality of our tonic mind-bodies. And one may suppose that this is the case quite as much for those given to raising doubts about reality in an abstract philosophical way when, like David Hume, they abandon their reflections for a

season to enjoy a bottle of wine and a game of backgammon with friends.

Positivism is an abstract philosophical doctrine, a second-order account of what is really real, always of course in contrast to that that it presumes to know is not. It is a dictum as to what is incorrigible, how this can in fact be known and therefore may be ultimately trusted. The conception of the world that it delivers to us is so bizarre that we may conclude there could not *be*, existentially speaking, any positivists: positivism is abstractly thinkable, but a positivistic life is unlivable. It is not even imaginable as something to be lived.

Yet, for all of that, positivism subverts our confidence in Reality¹—not the everyday reality of an incorrigible public world standing among men and serving as the setting for their common life, for as a depiction of *that*, positivism is altogether too incredible on its face to hold our attention. Rather it subverts our confidence in something else. It impeaches our assent to the Reality the *nonexistence of which is inconceivable*; the Reality that is archaic—temporally and logically—as the public worlds between men are not; the Reality that is an *absolute* by reference to which we are enabled to conceive the *relativity* of changing perspectives upon alternative worlds, even upon the taken-for-granted things within a given, everyday public world, and is therefore our *arché* for the distinction between what we take to be (relatively) real and what (relatively) less so; the Reality from which all our acts of indication arise and derive their warrant; and, finally, it is the Reality by relying upon which we are moved—first by our primitively oriented sentience and motility and then, in due course, by our ever more fully personal intellectual passions—to seek a substantiality commensurate with and complementary to this Being, the nonexistence of which is inconceivable.

I shall have to turn in what follows to an unpacking of the conceptually rather complex paragraph above. But first let us provisionally consider ways in which positivism succeeds in achieving this subversion.

I have been contending, you will recall, that our way of dwelling in the world reflectively, indeed, of having an everyday reality between us, is a function of the reflective instruments we are given to using, a function, that is, of the picture borne by the metaphorical intentionalities intrinsic to these instruments, and that this is the picture that we simultaneously both *have* and are *in the midst of*. I have suggested too, by way of illustration, that we could not *have* “before” us the contrapuntal and polyphonic picture of ourselves in the world given form about us by an orchestral transcription of Bach’s *Art of the Fugue*, or the picture of ourselves in the world

framed by our dwelling in a city with the plan of Washington, D.C., without our coming to be *in the midst of* them. I surmised, as well, that when Copernicus came to be no longer in thrall to what his eyes beheld each day as the sun rose and set, and performed an imaginative leap to the surface of the sun as the point from which to contemplate the orbital paths of the planets, he was following intimations that had been abroad in Europe for more than two hundred years. Anyone beholding the linearly perspectival paintings of Giotto and his successors has a clear sense of where he is in relation to the world represented in these paintings. Therefore, to such an extent, he attenuates his intentional bonds to the immediacies of that world, achieving thereby greater objectivity. So also does one achieve this disentanglement and objectivity in shifting from Ptolemy's system to that of Copernicus. Merleau-Ponty observed, you will recall, that the achievement of this specular image—whether in linear perspective or in Copernicanism—produces a passage from the “introceptive *me* to the visual *me*, from the introceptive *me* to the ‘specular I,’”² which marks the transition from one form of personality to another. Finally I suggested that once the imagination becomes imbued with this new picture, we come into some of our unique human powers—to distance ourselves from the rummage of the sense-manifold, to achieve objectivity—but also to suffer an alienation from our other senses in the matrix of our existent mindbodies in the world.

There is a direct line of descent of the picture of ourselves in the world borne in the metaphorical intentionalities of Copernicus's *De Revolutionibus Orbium Celestium* (1543), Descartes's *Discours de la méthode* (1637), Kant's *Kritik der reinen Vernunft* (1781), and Mach's *Die Mechanik* (1883), albeit as it descends it becomes more explicitly inhospitable to the existence in it of the person who, moved by intellectual passions, undertakes inquiry from out of the matrix of his own tonic mindbody. Copernicus is certainly no positivist in any sense. Indeed in his dispute with Osiander, he is, for Polanyi, the archetypal antipositivist. Nor is it an easy thing to classify Descartes and Kant as positivists alongside of Mach. And as we have seen, the picture delivered to us by the abstract philosophical doctrines of Machian positivism is so bizarre as to make no existential appeal to us, in for example its analysis of experience into isolate sense-data—ideas certainly uncongenial equally to Kant, Descartes, and Copernicus.

What these thinkers and their philosophical followers, witting and unwitting, have in common with one another is that each successive one, in language the metaphorical intentionalities of which abstract thought

more and more completely from the temporal thickness of the world, exsiccates us more exhaustively than the last from our own tonic mindbodies. Insofar therefore as we dwell reflectively in this picture, it subverts our confidence in the Reality the nonexistence of which is inconceivable, since this Reality has been edited out of it. Positivism does this by abstracting us from our mindbodies, that Being by relying upon which we are moved by our intellectual passions to seek in nature a substantiality commensurate with and complementary to itself. It is *this* Being that has disappeared from the picture that we both *have* and are *in the midst of*. And it is the positivist alternative picture in which modernity is immured.

Copernicanism is the decisive revolution out of which modernity emerged. Kant showed that he knew this well when he suggested that his own *Critique of Pure Reason* articulated a second Copernican revolution. For this *Critique* relies all unwittingly, no doubt, upon the application of the fundamental metaphor for man's situation in the world to the explication of a general theory of knowing, rather than merely the first step toward a new theory of planetary motion. The position of an inquirer who proposes a "transcendental deduction" of the conditions for the possibility of knowledge is the same as that of an inquirer proposing to contemplate the orbital paths of the planets as if from the sun.

Copernicus was powerfully moved by the intellectual beauty and the truth of his theory and its surplus of meaning which endowed it with the power to anticipate future discoveries such as in fact were achieved by Galileo, Kepler, Newton, and Einstein—discoveries he could not have explicitly imagined. *This* was the greater *objectivity* of Copernicus's theory over that of Ptolemy. It provided a standpoint from which to contemplate the planetary movements that is beautiful in its simplicity. But it also, and more importantly, afforded a framework from within which the human mindbody may launch itself toward a more ample and coherent comprehension of the nature of things. The imaginative leap from man's home on earth to the surface of the sun as the point from which to contemplate the orbital paths of the planets was precisely the move away from the *relatively* "subjective" embrangement amidst the immediacies of our everyday sense-experience to the *relatively* "objective," hence potentially more comprehensive perspective of Copernicus's theory. In his dispute with Osiander, Copernicus had no doubt that his theory bore upon reality. Therefore there seems to have been for him no loss of confidence in that Reality from which all our acts of indication arise and derive their warrant, by relying upon which we are moved to seek a substantiality commensurate with and com-

plementary to this Being: namely, the very mindbody in the world of the knower-doer himself. We may therefore assume that Copernicus's picture of himself as a knower-doer, which he both *had* and was *in the midst of*, was a picture in which his own tonic mindbody was still present.

Copernicanism, as we have seen, is superior to Ptolemaicism because it is a more objective theory from within which the tonic mindbody of an inquirer can contemplate the orbital paths of the planets and launch himself toward as yet unknown structures of the real, portended in the theory's surplus of meaning. Copernicus could not have believed that such a degree of objectification was (logically) possible as would entirely eliminate the ubiquity of the tonic mindbody of the knower-doer from his feats of knowing. This we know precisely from his refusal of the "positivistic" proposals of Osiander, for that refusal—not made, for example, by Ernst Mach—attests to the continuing sense of the reality for him of that Being by relying upon which he was moved to seek a substantiality commensurate with and complementary to itself from which all his own acts of indication arose and derived their warrant and that was nothing other than the presence for him, as the background of all his reflection, of his own unreflected mindbodily being; and that, as such, finally was a Being the nonexistence of which was inconceivable. Objectivity within the ampler picture that Copernicus both *had* and was *in the midst of* was the touchstone of the promise of a more ample contact with reality. This could not have been the objectivity from which the knower has been eliminated, else he would have embraced the Osianderian positivism as Mach's teachings did. And yet the influence of the Copernican ethos was not so modest. The Copernican leap to the sun, *as a picture of man as knower*, was a seduction to view himself as one who has the perspective of God—beholding a contingent world, while in no wise becoming entangled in its contingencies—thereby absconding from his own mindbody and its situation on the face of the earth. The mindbody is, for all intents and purposes, eliminated from the Cartesian picture and from the Kantian picture—at least as given in the latter's first *Critique*. *In this sense*, Descartes and Kant are cryptopositivists, if not at times fully developed ones. By the time of Mach an orthodoxy of the imagination has exercised sway for so long that there is small wonder, the picture of the knower in his relation to the object of his knowledge having become so abstract, that his thought should issue in the absurdities of a sense-datum theory of perception—held at various times by various members of the Vienna Circle and other positivists of this century, of whose thought Mach was a progenitor—no less than in the

belief that in no case could our acts of indication have a bearing upon a reality beyond the mere efficient ordering of our sense-experience.

This is the positivism which is Polanyi's polemical target: the positivism that rejects thought as bearing upon reality resulting from the loss of our immediate sense of that Being the nonexistence of which is inconceivable. The sense of this Reality moves us to trust in the availability and inexhaustibility of realities that are complementary to itself. Losing this sense, we eliminate from our second-order accounts of our knowings the sense of their metaphysical reach.

His weapon against it is his explicit argument against those who insist (quite against the epistemological and historical evidence) upon giving a positivistic account (in the above sense) of the historical/epistemological relations among Copernicus, Kepler, Newton, and Einstein. But it is the virtual presence of Polanyi's own mindbody that is given by the picture of his (our) noetic situation, borne by the very metaphorical intentionalities of the text of *Personal Knowledge*, which moves him to mount and enables him to sustain a polemic against Mach. With Copernicus, Polanyi believes in the superiority of an abstract theory about the universe that intimates, if we will but rely upon it, the possibility of as yet unimaginable future discoveries. In this sense both Copernicus and Polanyi believe such a theory to be superior because it is more *objective*. Like Copernicus, Polanyi would give "preference to man's delight in abstract theory, at the price of rejecting the evidence of our senses" (*P.K.*, p. 3). And he recognizes explicitly what is implicit in the whole Copernican program, as I have construed it: that the "new Copernican system . . . [is] as anthropocentric as the Ptolemaic view, the difference being merely that it preferred to *satisfy a different human affection*," namely, the intellectual passion for abstract theory (*P.K.*, p. 4; emphasis added). Against Mach, he holds that our acts of indication *may* have, are intended to have (but emphatically do not *infallibly* have), a bearing upon reality; and that even the greatest achievements of objectivity—say in pure mathematics—cannot eliminate the intellectual passions of the knower-doer, hence it cannot entail a picture of the world that is prescinded from our existent, tonic mindbodies upon which these passions depend. Though all this is so—*because* all this is so—Polanyi is able to see the power of Mach's insight into the limitations of Newton's conception of space, which insight in fact inspired Einstein. Yet he sees that such an insight could come to Mach not through following the dictates of his own philosophy of science, but precisely through his forgetting them. For Polanyi says that Mach entertained a "super-Copernican

vision, totally at variance with our habitual experience. . . . To set aside [the] urge of our senses, which Newton had embodied in his axiom of an 'absolute space' . . . was a tremendous step towards a theory grounded in reason and transcending the senses. Its power lay . . . in that *appeal to rationality which Mach wished to eliminate from the foundations of science*" (P.K., p. 4; emphasis added). And he sees that even Mach's egregiously inaccurate account of the way in which we know was not powerful enough to inhibit in him a much deeper impulse toward rationality, rooted, as I should say, in that matrix of all meaning, his mindbody. For Polanyi says: "Mach prefigured the great theoretic vision of Einstein, sensing its inherent rationality, even while trying to exorcise the very capacity of the human mind by which he gained his insight" (P.K., p. 4).

We have now perhaps sufficiently articulated the premises upon which to exegete some, on their face, rather unconventional or awkward or puzzling uses by Polanyi of quite familiar concepts: concepts such as 'true,' 'real,' 'rationality in nature,' 'objective,' and 'intellectual beauty as a token of reality'—uses which have brought down upon him charges of obscurantism, mystification, and even of mysticism. Whether or not Polanyi's argument can be sustained is of course a licit and necessary question. However, our exegesis will show that, right or wrong, these particular charges can arise only in the setting of the acritically held orthodoxy of the philosophic tradition since the rise of Copernicanism as I have been interpreting it—as, that is to say, the unwitting progenitor of positivism: namely, the skepticism about the bearing upon reality of our theories resulting from our loss of confidence in the archaic Reality the nonexistence of which is inconceivable, from which all our acts of indication arise and derive their warrant and which moves us to seek "out there" in the world over against ourselves a substantiality commensurate with and complementary to this Being.

It is not a serious oversimplification to say that in the modern philosophic tradition, 'true' has in general referred to one or the other of two cases. Either it refers to that state of affairs that holds when the tokens in a language stand in such a relation to one another as to make and be taken by us as making a definitional assertion—to be, that is, reflexively expressing the way in which we are given to using these tokens: expressing, in short, their logical grammar. "All unmarried males are bachelors" would be an example of this. It is "true" analytically, "true" by definition. It cannot both obey the rules derivable from the actual way we are given to using its constituent words in our speech-community and be false. Alternatively,

'true' may refer to an assertion about a state of affairs in what we (usually) regard as the contingent world that cannot, as assertion, be inferred from the logical grammar governing the use of its constituents in our speech-community, which may be 'true' or 'false' and whose truth-value is susceptible of some form of verification through being tested against our experience of the world. Such an assertion, if true, is true synthetically, can be known to be true only a posteriori.

Polanyi says: "When we say that Copernicanism was fruitful, we mean that it was a fruitful source of *truth*. . . . [It] could well have been a source of truth—as the apocryphal text of Esdras [which asserted that the world is six parts dry land and one part sea, a belief entering into Columbus's calculations] was for Columbus—even if it had been false. But the Copernican system did not anticipate the discoveries of Kepler and Newton accidentally: it led to them *because* it was true" (*P.K.*, p. 147; emphasis in original).

Upon reading this, one begins to wonder how it is that Polanyi is using 'true.' Did Copernicus embrace his own theory because it was *true*?—that is, because he could *know* that it would anticipate Kepler's laws of planetary motion and Newton's theory of general gravitation: it was true, in short, because it could be known by Copernicus accurately to predict the future formulation of Kepler's and Newton's laws (in which case the precise relation between such predictions and any reliance upon empirical evidence would have to be articulated). Furthermore, if he could "know" that his theory could anticipate Kepler and Newton, then why did he not himself formulate the laws of planetary motion and of general gravitation? Or did he rather embrace it because it correctly computed the orbital paths of the planets and was therefore a true representation of a certain set of occurrences in the contingent world? Or did both its anticipatory powers and its accurate representation of the orbital paths persuade Copernicus of its truth? Clearly the question as to how to classify Polanyi's use of 'true' as to analytic and synthetic is a difficult one. Perhaps we can be sure only that the truth of the Copernican theory is not analytic. This leaves us saying that it is true synthetically. But then it is difficult to know how 'know' is used, when Polanyi seems to claim that Copernicus in some sense "knew" that his theory (even if it could not be known specifically to anticipate Kepler and Newton) was possessed of indeterminate anticipatory powers, *and that this was a mark of its truth*. But, again, wherein consists its truth, even were these indefinite anticipatory powers in some sense known? Is this "truth" then synthetic?

If I assert the simple proposition: "The average age of the men, women, and children living permanently on the Isle of Man is 53.7 years," you will know what I have asserted and how to determine its truth value. And if after appropriate investigation you say, "Yes, that's true," I shall know what you have assented to. If I say that the Ptolemaic *theory* or the Copernican *theory* of the orbital paths of the planets is true—and *mean no more by this claim than that they each more or less accurately represent the celestial timetable*, mean no more in other words, than Osiander wished them to mean—there is no marked difference in the use of 'true' here and in the case of its use applied to the simple proposition above. Polanyi observes that, after all, "Duhem and Poincaré, *from a positivist point of view*, could regard the factual content of the two rival systems as having been identical" (*Duke*, I, p. 7; emphasis added).

But then Polanyi continues: "I distinguish between the precise predictive content of a mathematical theory consisting in a functional relation of measured variables and *a meaning of the theory which goes beyond this*. While these functional relations remain the same, whatever symbols are used for presenting them, *the surplus of meaning which goes beyond this* depends on the appearance of the theory." (*Duke*, I, p. 7; emphasis added).

He then illustrates this claim as follows: We could devise a list, he suggests, of all the towns in England, giving the longitude and latitude of each and the number of inhabitants of each. Now of this list, if accurately drawn, we could say, I assume, that like my simple proposition and also like the Ptolemaic and Copernican theories *as articulations of the celestial timetable*, it is true. If we were then to express the identical factual information concerning English towns on a map, inscribing their names at the appropriate point of longitude and latitude and placing a circle around the name of each town, its circumference dictated by the town's population size, then a whole range of demographic, historical, geological, and geographical questions hitherto unimaginable would instantly arise. The factual information as to the location and size of the English towns expressed both on the list and now in the map is the same: the *list* is "true"; the map, insofar as it gives a true, even though variant, mode of expression to these facts is also "true." But the map *insofar as it possesses a surplus of meaning*, that is, insofar as it structures the factual information in such a way as to evoke hitherto unimaginable questions, is *also* true—but neither just true as the list is true, nor yet just true as the map, insofar as it expresses the same factual information, is true. The heuristic and anticipatory powers of the map—its capacity to open our eyes to reality: say, the correlation

between population density and the course of rivers—are measures of its truth, in Polanyi's sense of true! And we should "recognize" its truth in this sense—its heuristic power, its capacity to open up ever new vistas upon reality before we know what *in particular* these might be. 'True' in this sense would mean "possessed of heuristic potency." What's more, were a three-dimensional topographical model that expressed all of the same factual information to evoke still *other* hitherto unimaginable questions and their solutions, we should say that its *excess* of surplus meaning over that of a simple map would constitute its greater truth and also its greater objectivity. Polanyi says that "truth lies in the achievement of a contact with reality—a contact destined to reveal itself further by an indefinite range of yet unforeseen consequences" (*PK.*, p. 147).

It is obvious that the use of 'true' to refer to the list and the map insofar as they embody factual information is the familiar application of the word to indicate the truth value of synthetic propositions. But what of 'true' applied to the surplus of meaning in a map over a list of towns, in a three-dimensional model over a map, in a theory. Do we *really* wish to say of a theory, of its intimation that, if we dwell in it, we will be provoked to ask hitherto unimaginable questions, to discover hitherto inconceivable answers, to discover rationality in nature—do we wish to say that, because it possesses these powers, a theory shall be said to be true? This would seem not to be an instance of either of our familiar cases above: true *a priori*; true *a posteriori*.

It is clear that Polanyi *does* wish to use 'true' in this heterodox way. It is also clear that its use in this way requires that he bring it into unexpected alliances with the use of 'real'—and even of 'intellectual beauty as a token of reality.' He says: "If anything is believed to be capable of a largely indeterminate range of future manifestations it is thus believed to be real. A statement about nature is believed to be *true* if it is believed to disclose an aspect of something real in nature. A true physical theory is, therefore, no mere functional relation between pointer readings, but represents an aspect of a reality, which may yet manifest itself inexhaustibly in the future" (*Duke*, I, p. 12; emphasis in original).

The simple proposition concerning the average age of the permanent population of the Isle of Man, if *true*, discloses something *real* in nature, namely, the present average age of the Manx. As it stands *strictly by itself*, it truly discloses a reality—but, taken by itself, *if this is possible*, we can infer nothing about its being merely an aspect of reality in any other sense than that it is just one of very many sorts of things to be known about the Isle of

Man. The proposition taken *strictly by itself*—were this possible—*cannot contain the aspect-whole distinction*. We could readily make a list of things known, thereby expressing *truly* a number of *realities*. However, it turns out not to be possible to take a proposition strictly by itself. For among the propositions on our list there could not fail to be certain “logical” connections; I shall not consider whether these are those of implication. Inasmuch however as the words in the propositions share among them a logical grammar, that is, they are subject to common grammatical and syntactical rules derived from what in our speech-community we are given to doing; inasmuch, too, as they are jointly subject to the semantical rules of our speech-community; and, finally, inasmuch as all of this presupposes a language, a speech-community, comprised of persons who dwell in the landscape of their intentional mindbodies set within the ambient landscape of *la langue* for whom therefore the list of true propositions, richly implicative, has a meaning; it is impossible to take any one of the propositions on the list *strictly by itself*. The grammatical, syntactical, and semantical rules governing a given proposition will “imply,” in a somewhat unfamiliar and certainly in a not wholly formalizable way, every other proposition on the list for any competent speaker of English. In comprehendingly reading the single sentence, taken as *figure*, i.e., taken as an “aspect,” all of the grammar of our language and our existent speech-community serve as *ground*, i.e., as the “whole.” In this sense it has to be conceded that even the single true proposition expressing something real alludes beyond itself—perhaps to an indeterminate reality beyond itself of which it is perceived to be but an aspect. This being the case, each proposition on our list expresses a *truth* about the *real*; each, as *figure* for a mindbody who comprehends it, alludes to all of the other propositions on the list, as its *ground*, by virtue of their common “logic”; and the list in its entirety alludes to an indeterminate range of possible other true propositions that comprise *la langue* for a native speaker that might express as yet undetermined realities. In this sense even the single proposition possesses a surplus of meaning; all the more does the list as a whole—though the indeterminacy of its surplus of meaning, while very great, is not infinite (e.g., the possibilities would be different if the list were in Hebrew). The logical relations holding (and these hold only for an existent mindbody in the setting of an actual speech-community) between a single proposition and all others with which it shares common grammatical, syntactical, and semantical rules, embodying therein a surplus of meaning hence alluding indeterminately beyond itself, are the source of the aspect-whole distinction.

The impossibility, in this sense, of “taking the single proposition strictly by itself” would render incapable of coherent assertion the Machian view of scientific theory as a merely convenient summary of experience, having no ontological import, however indeterminate; having no bearing upon a reality beyond itself. The “theory” alludes to some articulated experience, itself tacitly but inexpungibly alluding to that in which it is imbedded, with which it is implicated, itself not the articulated experience. At length that in which it is imbedded alludes to Mach’s own existent mindbody, which even for him has *some* reality more fundamental than the experience that has been articulated. The ubiquitous and irrepressible demand for integration on the part of that matrix of all meaning, the existing mindbody, makes it impossible for us to take the single proposition strictly by itself and therefore makes impossible the coherent assertion of Mach’s theory of the role of theory in scientific inquiry.

It is worth remembering at this juncture what picture it is that Mach both *has* and is *in the midst of* and that he shares with philosophers of the tradition. What model of the situation of the knower in the world, vis-à-vis the objects of his inquiry, so governs his account of his knowing that, on one hand, it cannot be coherently asserted, yet on the other, seems not to have impeded the success of his own actual inquiries? How, in other words, could Mach have become a positivistic philosopher of science? How could he hold that scientific theory is merely a convenient summary of experience, with no “metaphysical reach” and no surplus of meaning—which view, as we have seen, even in the most trivial sense, in the sense, namely, of a simple proposition about the limits of scientific theory, cannot be taken *strictly by itself*, as making *no allusions beyond itself*, therefore without any surplus of meaning, thus cannot be coherently asserted? How could Mach hold these views while he at the same time successfully engaged in the first-order activity of scientific inquiry? The answer of course lies in the fact that his second-order account is ignored in his practice. As the last in the line of descent from Copernicus, Descartes, and Kant, in the metaphorical intentionalities of whose thought the picture borne of ourselves in the world becomes more and more explicitly inhospitable to the existence in it of the person undertaking inquiry from out of the matrix of his own tonic mindbody, Mach’s own picture is one in which he is himself, as actual inquirer, most fully abstracted from the intentional density of the world. And it is *this* world that is inherently endowed with surplus of meaning. For the tonic mindbody in its world, any given focally apprehended meaning alludes to an indefinite range of other meanings. To put perhaps too

fine a point upon it, Mach's imagination, as the propagator of a positivistic interpretation of scientific theory, is dominated by the visual model of spectation wherein one beholds all the particulars of what is before one's glance as simultaneously co-present in a slice of dead (visual) space among which particulars none intends any other and the given visual field makes no allusion beyond itself. And as we have seen, insofar as we dwell reflectively in this picture, it subverts our confidence in the Reality the nonexistence of which is inconceivable, namely, the intentional mindbody in its world. How otherwise than by being comprehended in the matrix of my existent mindbody could the simple proposition, "The average age of the men, women, and children living permanently on the Isle of Man is 53.7 years," be perceived as alluding beyond itself to every other proposition on the list of conceivable factual statements about the Isle of Man; in short, be perceived as having a surplus of meaning?

Now, let us look at the Ptolemaic and Copernican theories *insofar as they both equally and truly express the celestial timetable* followed by the observable movements of the planets—independent of the question as to whether one is superior to the other in virtue of some other characteristics that one or the other may possess. And immediately we see that, just as the expression of the reality of the celestial timetable, they both possess a surplus of meaning in the same way and for the same reason that our proposition concerning the average age of the Manx does: each necessarily alludes beyond itself because the "language" in which it is formulated has a logical grammar connecting it with an indeterminate number of other propositions for a given speech-community in that language and this is comprehended in that matrix of all meaning—the existent, tonic mindbody of a person, viz., that Reality the nonexistence of which is inconceivable to him.

If then we are to follow Polanyi's use of 'true,' it is clear that at least we shall have to say of our simple proposition concerning the average age of the Manx, of Ptolemy's theory, insofar as it truly expresses the celestial timetable *in its language*, and Copernicus's theory, insofar as *it* does so in *its*, that they are all true as embodiments of their factual content—and are, to this extent, true synthetic propositions a posteriori concerning contingent facts. It also seems that since, though certainly in varying degrees, they all possess a surplus of meaning pointing beyond themselves as synthetic propositions a posteriori, Polanyi wants to claim that this presence of surplus of meaning, this allusion to an as yet undiscovered domain, endows our proposition and each of our two theories

with "truth" in a sense not reducible either to true a priori or true a posteriori.

When Polanyi says then that Copernicus and his contemporaries—as well as Kepler and Newton later—were drawn to his new theory of planetary motion because they concluded that it was *real* and that it was *true*, he is asserting that the presence in it of this surplus of meaning irreducible to either true a priori or true a posteriori was responsible. For in this *heuristically potent* surplus they saw intimations of a power to disclose hitherto hidden realities that the Ptolemaic theory did not possess; and in this surplus of meaning lay for them its *already tacitly perceived* though *as yet indeterminate* truth and reality—in a sense of 'truth' and 'reality' not assimilable to the familiar uses of these conceptions. And by confidently relying upon these intimations (in spite of the hazard that they might prove to be either false "clues" that in fact led nowhere or real clues that if misconstrued would lead in the wrong direction), by inflaming their intellectual passions for objectivity, order, meaning, and wholeness, elicited in them a powerful—and one wants to say, *archaic*—sense of a rationality in nature as exempt from superficial, bemused skepticism as is our immediate commonsense trust in the existence, integrity, and order of our own mindbodies, since it is in fact continuous with this trust.

Such a belief, challenged in the event by Osiander because of jittery theological scruples, can hardly any longer be ingenuously embraced by us. Now, after 350 years of increasingly attenuated abstraction from this Reality by a dogmatically positivistic philosophy of science, we are no longer rooted in an acritical assent to it. And this neurotic scrupulosity and renunciation of the underived Reality of oneself in the world is by no means confined to so-called professional philosophers, but is rampant among literate people the world over, wherever Western values have taken root. It is virtually a worldwide climate of opinion.

However, before proceeding in search of a way to make more congenial to us the ingenuous certainty imputed by Polanyi to Copernicus and his successors, let us return to the nature of the surplus of meaning that we found in our proposition about the Manx and in the Ptolemaic and Copernican theories.

Earlier I have claimed that even the proposition, "The average age of men, women, and children living permanently on the Isle of Man is 53.7 years," cannot be taken by itself and therefore possesses a surplus of meaning beyond the factual content that it embodies. And I argued that this is the case because among the proposition and a list of propositions of a

cognate sort, truly expressing other facts about the Isle of Man, each alludes to all of the others by reason of their common “logic”; that the list in its entirety alludes to an indeterminate range of possible other true propositions that express as yet undetermined realities, including further facts about the Isle of Man. The implication of this in Polanyian terms is, I suggested, that the surplus of meaning possessed by even a single proposition had some truth value, was “true,” was “real,” possessed intimations of the existence of as yet undisclosed realities because it bore upon reality. Finally, having in mind Polanyi’s claim that “a statement about nature is believed to be *true*, if it is believed to disclose *an aspect* of something *real* in nature” (*Duke*, I, p. 12; emphasis upon “an aspect” and “real” my own) and wondering how, if a single proposition could be taken strictly by itself, without a surplus of meaning *in some sense*, it could be understood as bearing upon an *aspect*, therefore wondering whence the aspect-whole distinction *itself* might arise, I suggested that it was from within the logical tension holding among a single proposition and all others in the practice of the language of a given speech-community that this distinction arises: it arises in the tension between *la parole* and *la langue*; between my present actual speech-act and its setting within the landscape of *la langue*. To say this in another way: I am at every moment mindbodily ensconced in a rich plexus of indeterminate meanings, embodied in *la langue*. In every act of speech I attend from this richly implicative grid of surplus meanings in my native language *as ground* to what I am actually bodying forth in speech *as figure*.

What, we must ask, is the significance of this surplus of meaning in the single proposition, beyond its disclosure of the aspect-whole distinction? It is surely very difficult to argue convincingly that it possesses, if at all, any but the most limited and trivial heuristic power, even difficult to say what that might be. The grammatical, syntactical, and semantical rules—the logical grammar—of the single proposition and its cognates do not on their face afford a “theoretical” grid, a framework for grasping hitherto unnoticed consanguinities among facts that portend the future disclosure of yet others, even when compared with the modest heuristic superiority over a mere list possessed by a map of England with the physical location of cities marked on it. We must therefore conclude that the surplus of meaning of the single proposition, though embodying in its tension with others in a language the aspect-whole distinction and therefore yielding a discovery that illuminates the radicality and ubiquitousness of meaning—viz., the allusiveness of “particulars” to wholes—is of trivial import for

rendering plausible the Polanyian claims concerning the Copernican confidence in the “truth” and “reality” of his theory prior to its elaboration and confirmation in Kepler and Newton—although it could be argued that the plexuses of implication embodied in the grammar of our language, the dense network of etymological allusions it contains, constitute a “theoretical” grid possessed of real, even if indeterminate, heuristic potency.

However, let us move from the immediate case to one at some remove from it, yet one still a great distance from the sweeping Copernican shift from the earth to the sun.

Here we will move away from the logical grammar—the use practices—of a single speech-community. Let our view of this speech-community from which we move be as parochial as “all contemporary native speakers of American English who neither speak nor read any other language.” Let us stipulate that the limits of American English will be defined as the sum of all of the entries in *The American Heritage Dictionary of the English Language*—except with all of the etymological data removed. And let it also be stipulated that what we mean by “use practices of the American English speech-community” is limited, for discussion purposes, to those articulated by *The American Heritage Dictionary*, defined as above. The surplus of meaning of any given word or of any given proposition formed of them would be of the sort they could only have in this definition. Their heuristic power, if any, would be only of the sort found in our propositions about the Isle of Man. As a “theoretical” grid, its heuristic power to disclose and grasp hitherto unnoticed consanguinities is real but highly indeterminate.

Let us now move from this artificially parochial and (relatively) subjective setting on the “earth” of this speech-community to the (relatively) objective setting on the “sun” provided by juxtaposing *The American Heritage Dictionary* to Partridge’s etymological dictionary of English, *Origins*. We would now have a “theoretical” grid made rich, complex, and heuristically powerful by the addition of the historical, etymological, and grammatical bonds holding between American English, on one hand, and Sanskrit, Greek, Latin, Anglo-Saxon, Avestan, Dutch, Danish, Arabic, Finno-Ugric, etc., on the other, as well as the analogies and disanalogies that hold among the meanings of the American English words and their etymological radicals in these languages. In short, our “theoretical” grid would embody the metaphorical intentionalities borne in this etymology and in their surplus of meaning which would be possessed of heuristic power—the power to reveal indefinitely hitherto unsuspected realities. This is the heuristic power discovered in my early etymological discursion on the American English

word 'tend.' By acting upon the "theory" that a given word in American English has a history, that it has etymological/logical bonds to words in other languages, both synchronic and diachronic, with which it is consanguine, that highly abstract, that is, intellectualistic, uses of the word and its cognates are etymologically rooted in concrete, archaic uses that are at bottom articulations of the very ordination of the mindbody's own primordial energies—for example, in 'tend,' as to stretch, in 'tone,' as to make tense, healthy, alive—we are led to discoveries about the nature of "mind" and of "body" at their radix—of mindbody. We discover that at bottom they are not two, but one; that language, our first formal system, has the sinews of our mindbodies which had them first; that the grammar, syntax, meaning, semantic and metaphorical intentionality of our language are preformed in that of our prelingual mindbodily being in the world; therefore, that formalized rationality—mathematics and formal logic—derives from and remains parasitical upon the hanging togetherness and sense-making of our integral rootedness in the as yet unreflected world. This etymology leads to the discovery, in short, of a *post-critical logic*—which is nothing other than a precritical logic recovered after an excess of criticism.

The addition, through the overlay of etymology, of an ampler surplus of meaning by that heuristically trivial surplus already possessed in simple American English, defined as above, provides us with a heuristically powerful theoretical grid, hitherto not available. And this happens in ways analogous to those that placing the names of the listed towns and cities of England on a map does. Such a move of course does not possess the daring and the sweep of Copernicus's imaginative leap from the earth to the sun. But the intellectual passion first aroused by the discovery that 'tend' is bonded to the Latin *tendere* (to stretch) and that 'intend' is connatural with the Latin *intendere* (to stretch forth), comes to be inflamed almost to the point of making one believe that a lifelong apprenticeship to the unabridged *Oxford English Dictionary* would not be long enough to exhaust the realities vouchsafed in the plexuses of meaning inhering in the etymologies of its entries. One becomes excited enough indeed to believe that the *O.E.D.* is pregnant with the whole of Indo-European humane culture. This intellectual passion is an analogue of that that first moved Copernicus to believe that the surplus of meaning in his theory, over and above its true embodiment of the celestial timetable, was *true* and *real* because of its bearing upon reality and because of its anticipatory powers. One has the sense that the etymology of American English, upon discovering the radicals of 'tend,'

is fecund with as yet unimaginable realities, endowing us with intellectual power and objectivity by enlarging our vision above the merely parochial even while preserving our connection with it and with our most primitive powers for achieving the most rudimental and wonted forms of orientation in the world. This sense is the analogue of the sense that Copernicus had that his theory was true because it provided a picture of the orbital paths of the planets whose logic portended as yet undisclosed and even unimaginable realities. This intentionality of our mindbodily being and its reflective instruments toward a substantiality and inexhaustibility that is commensurate with it—whether as manifest, at one extreme, in our earliest gropings toward the reality that exists between men, embodied in their speech, or as manifest at the other in a general theory of relativity—attests to the basal fact that *all* sentience is, as such, surplus of meaning.

None of our acts of indication—whether we use a word to name a particular, a proposition to assert a fact, a theory to explain the orbital paths of the planets, or a treatise to articulate a metaphysic—is infallible. They are all inherently risky—though the risks attending each of these acts are not the same, the penalties for failure not equal. Nor do these acts of indication all have the same range of logical efficacy. Accordingly they are not equally objective, subsuming under themselves the same range of phenomena. Nor have they all the *same* surplus of meaning; even less have they all the same heuristic power. Even so they all equally arise within and derive their warrant from our mindbodies, that Being the nonexistence of which is inconceivable, by relying upon which we are moved, first by our primitively oriented sentience and motility and then, in time, by our ever more fully personal intellectual passions, to seek a substantiality commensurate with and complementary to this Being. In *this* they are all equal; in this—all inherently hazardous, some more subjective, with a surplus of meaning more heuristically potent—they all are *intended* to make contact with reality; they all have an ontological reach. For the intentional mindbody in its world any given apprehended figure *to* which it attends (beginning with its own prereflective apprehension of itself) alludes to an indefinite range of grounds *from* which it attends. The mindbody pretends the *figure* it focally apprehends even as it is retrotending itself as *ground*. Copernicus perceived his theory to be superior to that of Ptolemy because it struck him as more objective, more potent with anticipations of future discoveries, and therefore capable of *seeing more profoundly into the rationality of nature*. Even so, Ptolemy's theory was no less propagated as an act of indication

with universal intent, bearing upon reality.

Of course! It could not *be* otherwise. Yet Mach and the positivists have, in their *accounts* of scientific knowing, suggested otherwise. For this reason it is necessary once again explicitly to assert and take with epistemological seriousness that that *is* the case which could not be otherwise!

XIII

A theory then is believed to be true and its conceptions real to the extent to which, being perceived as possessed of heuristic power and intimating as yet unimaginable profound ingressions into the rationality in nature, it evokes our intellectual passion for future inquiry, over and above its capacity to express, order, and explain the elements of what we have experienced.

As we have seen, none of us seriously doubts the independent existence of a real world. Such sweeping skepticism as we all quite seriously express from time to time is of the existential-axiological sort. As for the other sort, it is measured and parochial, having to do with doubt about the reality of this or that. And such particular doubts as these are usually susceptible of resolution by reference to specifiable evidence. Apart from these prosaic, quotidian forms of skepticism, ordinary men have as little doubt that the grid of ordinary language bears upon a real world as the neonate "doubts" that its own rhythmical arm and hand movements are connate with the lilt of its mother's speech. The skepticism of practicing scientists is equally as little global in its scope as is that of ordinary men. It, too, is temperate and insular by comparison, albeit sophisticated and more significant. Their empirical propositions are taken to make contact with something real. Indeed, universal doubt, if it were possible, not only could have no contribution to make to actual inquiry, it would render it impossible. As Kierkegaard observed, "Telling a man to begin to think by doubting everything is like telling a soldier to come to attention by collapsing in a heap." Even skeptical philosophers, warily in search of an unimpeachable empirical claim, find it within themselves to believe that the locution "This red patch now . . ." is somehow certainly about something other than itself. We matter-of-factly take for granted the reality of a world that stands between men as the setting for some form of common life and possesses a

modicum of incorrigibility. The indicative mood is radical; the subjunctive is always parasitical upon it, since it is grounded in the intentionality of our mindbodies.

Yet Machian positivism as a second-order putative account of our first-order believings, evaluings, and knowings, abstracted from the "form of life" where these take place and are subject to no inordinate doubts, still holds us in thrall in a fundamental way.

An ecumenical doubt, infused with an intellectual energy sufficient to affect a whole worldwide culture, only became possible when a Descartes, during a few hours, took himself to be a world-transcending—even a self-transcending—god before whom "everything" could be arrayed, as if in a gnostic instant, to present its credentials to a detached and noncommittal gaze. The seventeenth-century confidence in the theoretical power of mathematics—because of its bearing upon reality, because, in short, it was the language in which the text of nature was written—not only more profoundly to disclose the rationality in nature, but, as it was thought, really to disclose it for the first time, was perfectly expressed by Descartes. There was no sense for him, for Kepler, Leibnitz, or Newton—any more than there had been for Copernicus and Galileo—that mathematics was lacking in heuristic power, was a mere empty tautology without bearing upon the nature of things. On the contrary. Nor was this the case for Mach as a first-order practicing scientist. Yet as the author of a second-order positivistic description of scientific knowing, he is himself subject to his own picture of our situation in the world as knowers, alienated by abstraction from our tonic mindbodies, embrangled in the temporal thickness of the world. Therefore he deprives us of our natural and licit global certainties which are rooted in the primordial indicative mood from which our limited and local doubts arise. And again it is well for us to remember that none of the prodigies of science could have been accomplished if scientists had remained strictly faithful to the positivistic account of what they do and how they do it.

And yet this very positivism can uniquely impeach our sense that the conceptions of mathematics are "real" and that its "assertions are true"—to use Polanyi's language—inasmuch as, at least on their face, their formulae are empirically empty. This easily leads to the supposition that higher mathematics is a system of empty tautologies without ontological reach and heuristic power—not in our practice of it but in our second-order reflection upon its foundations. It is here that number is likely to be conceptually most fully estranged from its natural affiliation with an

extranotational reality by reason of its alienation from the matrix of all meanings, the tonic mindbody.

In the face of this, Polanyi moves to give to mathematics the same fiduciary grounding in our inherently fiduciary mode of being as mindbodies, realizing that without this grounding it would become meaningless. Without the intellectual passions, which can only abide in the intentional mindbody, to sustain our unproven assumptions and to pretend ever new integrations, the conceptions of mathematics would “dissolve and its proofs carry no conviction” (*P.K.*, p. 192). It would become “pointless and would lose itself in a welter of insignificant tautologies.” The semantic and “ontological” thrust of *all* our acts of indication—by no means infallible—grounded in and archaically warranted by our mindbodies, that Being the nonexistence of which is inconceivable, *includes our mathematical assertions and their premises*. A world-transcending god would understand mathematics and find it to be significant only on condition that he was a mindbody moved by intellectual passions!

Before this positivistically induced skepticism over the foundations of mathematics and of its heuristic bearing upon something other than itself—skepticism over the “reality of its conceptions” and the “truth of its assertions” (*P.K.*, p. 192)—Polanyi says: “We must ask—as we did in the case of the natural sciences—what the logical position of [the] system of formal premisses [of mathematics] is and, in particular, on what grounds we accept it as valid” (*P.K.*, p. 191). He then continues: “When certain undefined terms, axioms and symbolic operations are established as the logical antecedents of mathematics, these are based on the prior assumption that mathematics is true” (*P.K.*, p. 191). By this last claim I take Polanyi to mean that mathematics is *true* as the Copernican theory is true, *over and above being the accurate expression of the celestial timetable*, true as bearing upon reality with the possibility of leading to new problems and their solutions. And I conclude that this supports my exegesis above wherein I suggest that *all* our acts of indication, including our mathematical ones, possess a semantic and “ontological” thrust, since they are grounded in and are archaically warranted by our existent, intentional mindbodies. And this is further borne out by what Polanyi says next—the much-visited and deeply puzzling remark already interpreted in the context of our reflections upon his innovations in the uses of logical terms. He says, you will remember: “Our acceptance of what is logically anterior is based on our prior acceptance of what is logically

derivative, as being implied in our acceptance of the latter" (*PK.*, p. 191).

In this context the passage must be seen as introducing the innovative uses of logical terms in the service of achieving different, though analogous, clarifications. With it Polanyi is underscoring the fact—obvious, to be sure, to common sense—that the “system of formal premises” of mathematics cannot meaningfully just “hang in mid-air” or even just appear written out, as it were, on some cosmic blackboard, with no mathematicians about. For, again obviously, apart from the comprehension of the meaning of these symbols and their relations, and a subscription to them as a statement of the system of formal premises of mathematics *from within our mindbodies as mathematicians*, it is all but blind chalk marks on a black ground. But what is of far greater importance, the *grounds* for *accepting* this statement of premises cannot themselves be formally expressed—least of all in symbols logically homogeneous with those appearing on the cosmic blackboard—since there *are* no *formalizable* grounds. The truth, profoundly shocking for our Enlightened imaginations, is: our only ground for accepting them is the fact that we do accept them and cannot imagine *not* doing so. Such “grounds” as exist are lodged in what our mindbodies have been given to doing, insofar as we have been affiliated through a discipline to the *practice* of doing mathematics. Wittgenstein says: “Language did not emerge from some kind of ratiocination”—to which we add, “and neither did mathematics.”

In this setting then the familiar and troublesome passage from page 191 serves to express the embodiment in the mindbodily matrix of meaning of the “system of formal premises,” *together with the fact of our acceptance of them*, even though we have no specifiable formal grounds for doing so. And the passage tells us that *if* mathematics *could* be fully axiomatized we should have the logical relation between the “system of formal premises” and the grounds for holding them as follows: we can now accept a reflected formulation (were such possible) of our hitherto tacit believings, as implied in our practice, after the fact of our having relied upon them (the tacit believings implied in our practice) as the logical/ontological *grounds* of our coming to achieve our presently *explicit* beliefs (“system of formal premises”) because we have come to see that *these* believings are implied in our presently achieved explicit beliefs, which hitherto were merely tacit.

Polanyi then is speaking of the contrast between the living science of mathematical research as embodied in the living mathematician, where the inquirer, moved from within his intentional mindbody by intellectual passions, obsessed by “thousands of venturesome guesses” until they are

“laboriously brought . . . to the test of completion” (*P.K.*, p. 190)—all the while relying upon the clues and hints tacitly supplied by the mindbody from which he attends, on one hand, and the aspiration to achieve axiomatization, on the other. This latter wish to render formal and exhaustively explicit all of the premises of mathematics and also the “grounds” for our holding them, most of which, as we see, have their being and grounding only as the mute and unreflectable “premises” of our intentional mindbodies, is a wish as little likely to be requited as a similar one with regard to the premises of science (“The logical premises of factuality are not known to us or believed by us *before* we start establishing facts, but are recognized on the contrary *by reflecting on the way we establish facts*”). A program to axiomatize mathematics—formalizing all of its premises and also the grounds for holding these premises—is doomed to failure, since it ignores the fundamental discovery of the Polanyian critique, viz., that there can (logically) be no explicit formal assertions unless there are the tacit (and by no means necessarily explicable) “formal” grounds for it. Even more serious, since the premises of mathematics and our reliance in practice upon their validity are, in the end, blindly dependent upon the matrix of our existent intentional mindbodies, any device that, like formalization, has the effect of estranging us by abstraction from this matrix will serve to impeach our confidence in the ontological reach of the putatively empirically empty concepts of mathematics. It will then no longer be possible to say of mathematical propositions both that they are true by virtue of being internally coherent—true a priori—and also true and real insofar as they are pregnant with the possibility of disclosing hitherto undiscovered aspects of reality. Indeed even just being subject to the tutelage of the unrealizable ideal of total axiomatization can serve to weaken confidence. As certainly as it is only the intellectual passion that is rooted in our mindbodies that sustains our relation to and confidence in the semantic bearing of ordinary language—that reflective instrument itself abstracted from our tonic mindbodies, but inalienably retrotending it in our use of the first person singular pronoun—so certainly does it sustain the system of formal premises of mathematics. For were this passion extinct, “we would cease to understand mathematics; its conceptions would dissolve and its proofs carry no conviction” (*P.K.*, p. 192). Any move therefore that would, by aspiring toward exhaustive axiomatization, invite the illusion that mathematics stands by itself, in an eternity, threatens it with collapse.

Polanyi then confronts us with the same paradox, as it appears in

mathematics, as appears throughout *Personal Knowledge*: the paradox of the impossibility of establishing by formal procedures the ultimate premises of our knowing; the impossibility of vindicating by an appeal to some impersonal norm our most rudimentary believings and evaluings—the (logical) dependence of all our explicit knowings upon tacit believings.

The mathematical form of the paradox is that mathematics is based upon “a system of axioms which are not regarded as self-evident and . . . cannot be known to be mutually consistent” (*P.K.*, p. 191). Polanyi then goes on to say: “To apply the utmost ingenuity and the most rigorous care to prove the theorems of logic and mathematics, while the premisses of these inferences are cheerfully accepted, without any grounds being given for doing so, as ‘unproven asserted formulae,’ might seem altogether absurd (*P.K.*, p. 191). And it is indeed absurd *so long as we approach the statement with an imagination allowing to the conception of ‘having grounds’ only that sense it would possess when this “having” is explicit or explicitable* and therefore such a sense as would permit “grounds” to be *given*.¹ Whereas of course the scandal disappears if we remember that all of our most fundamental believings and evaluings are (logically) dependent upon their mute embodiment in our intentional mindbodies in their convivial setting, beyond explicitation, which therefore can only be acknowledged and owned.

Polanyi then wittily imagines the paradox of rigorously proving theorems of logic and mathematics while accepting their premises “without any grounds” in terms of a clown’s routine—a model applicable, of course, over the whole range of all our explicit believings and knowings, which are grounded in tacit believings and knowings whose only “ground” is that we do, in fact, hold them. The clown “solemnly sets up in the middle of the arena two gateposts with a securely locked gate between them, pulls out a large bunch of keys . . . laboriously selects one which opens the lock, then passes through the gate and carefully locks it after himself—while all the while the whole arena lies open on either side of the gateposts” (*P.K.*, p. 191). And then he draws the analogy: “A fully axiomatized deductive system is like a carefully locked gate in the midst of an infinite empty area” (*P.K.*, pp. 191–92).

How then are we to solve this problem? The answer, so crushingly obvious as to be a taunt to our most natural Enlightenment anxieties and therefore likely to be perceived, even though entirely credible, as being philosophically of no account, is to admit that the only ground we have for holding the system of premises of mathematics to be true, that is, to have heuristic power, to have a bearing upon reality—in short, an “ontological”

reach—is the fact that we *do* hold them to be such. Their ground is their largely mute embodiment in the practice—what we do, what we are given to doing—of our intentional mindbodies in their primordially convivial setting, moved by intellectual passions. Polanyi says:

The solution lies in rejecting the rule which denies acceptance to unproven statements, by admitting that our belief in logically anterior maxims of mathematical procedure is based on our previous acceptance of these procedures as valid. And let us remember once more that logical antecedents derived from the prior acceptance of their consequents are *necessarily* less *certain* than the consequents. It is clearly *unreasonable*, therefore, to regard these antecedents as the *grounds* on which we accept their consequents (*P.K.*, p. 192; emphasis added).

Before proceeding, it is useful to pause over this last remark. We have encountered before the ambivalence evoked in Polanyi by competing models for the uses of logical terms. The uncertainties produced by this ambivalence lead to revealing equivocations in the following passage. When Polanyi asserts “that logical antecedents derived from the prior acceptance of their consequents are *necessarily* less certain than the consequents,” he unwittingly retreats to the received sense of ‘necessity’ and of ‘certain’ as the standpoint from which to appraise the epistemological status of the “logical antecedents” mentioned here. To be sure, we have already remarked the fact that the “logical” connection between the “antecedents” upon which we have acritically relied and the “consequents” from which we have inferred them cannot itself be expressed in a formalism in which the terms are logically (and temporally) homogeneous. We have observed, too, that this connection cannot be known in the way in which we may be said to know that *P* implies *Q* when we read *P*→*Q*. However, we noted that a musical model of logical relation provides us an alternative way of understanding a logical connection that *can* be formalized, therefore can be known, be certain, and yet be in time, as are the relations of *C*, *E*, *G*, *C*, which logically/motivally pretends *E*, *G*, *C*, even as *E*, *G*, *C* retrotends *C*, *E*, *G*, *C*. In the above passage, Polanyi understands the phrase “less *certain* than the consequents” as if it were applicable only to something we might be said to know explicitly and not as if it were equally applicable to something that, even though it is the logical condition of our explicit knowledge, we would know only tacitly. In this passage from *Personal Knowledge* we have the equations: certain knowledge = explicit knowledge, less than certain knowl-

edge = tacit knowledge. Clearly, Polanyi does not intentionally hold any such equation as is derivable from the above passage. Similarly, he *concludes*, that is, he logically derives the claim that the “logical antecedents” derived from our prior “acceptance of their consequents” are less certain by applying the conception of ‘necessity’ that is as rigid as that conception derived from our picture of seeing. That is, if ‘certain’ is to be used to describe only that that is explicitly known, then *by that rule* it *must* be used only thus. Polanyi goes too far here—or in the wrong direction. Indeed it is not too much to say that *if* he uses ‘certain’ thus and ‘necessarily’ thus, then what he claims to be the case in this passage cannot be *known* to be the case, nor can it be coherently *said* to be the case.

Again, he says, “It is clearly *unreasonable* . . . to regard these antecedents as the *grounds* on which we accept their consequents” (emphasis added). The operative model for the use of ‘reasonable-unreasonable’ and of ‘grounds’ here is that that has dominated the philosophical tradition, rather than the new, innovative, flexible one that Polanyi himself implicitly holds. These “grounds” are “unreasonably” called grounds only if grounds can only be *explicit* or be explicitable *as grounds*. If however there may be (Polanyi has insisted that there *must* be) *tacit* grounds, then “to regard these antecedents as grounds on which we accept their consequents” is eminently “reasonable.” As we have seen, ‘ground’ in this sense is the very existential *arché* of our concept and paradigm of *grounding*. All this being so, it is well to remember that these equivocations, real as they are, have as their context in *Personal Knowledge* the unequivocal even if puzzling assertion: “Our acceptance of what is logically anterior is based on our prior acceptance of what is logically derivative, as being implied in our [acritical? undoubted? therefore certain?] acceptance of the latter.”

It is the suggestion that the *intellectual beauty* of mathematics betokens the reality (that is, the bearing upon reality) of its conceptions and the truth (that is, the heuristic power to disclose as yet unimaginable realities) of its assertions that is most unexpected. As we have seen, Polanyi has in several different connections affiliated the appeal for us of certain forms of thought with our perception in them of intellectual beauty, hence profundity, hence rationality. He says:

We cannot truly account for our acceptance of such theories without endorsing our acknowledgment of a beauty that exhilarates and a profundity that entrances us (*P.K.*, p. 15).

.

The affirmation of a great scientific theory is in part an expression of delight. The theory has an inarticulate component acclaiming its beauty, and this is essential to the belief that the theory is true (*P.K.*, p. 133).

.....

A theory like that of relativity continues to attract the interest of ever new students and laymen by intimations of its beauty yet hidden to their understanding: a beauty which is rediscovered every time a new mind apprehends the theory. And it is still for the sake of this remote and inaccessible beauty, and not for its few useful formulae . . . that relativity continues to be valued as an intellectual triumph and accepted as a great truth (*P.K.*, p. 172).

And yet this *intellectual* beauty—this beauty that cannot be discerned in the merely pleasing and superficial “shapes” of what appears in the metaphorical intentionalities of what is juxtaposed to touch, sight, hearing, smell, taste, indeed to all together—shines forth upon an archaic intellectual power in us from a depth beyond appearances and betokens a reality pregnant with an inexhaustible power to manifest still other aspects of itself. Hence it is at once difficult and necessary for it to be distinguished from mere “formal attractiveness” (*P.K.*, p. 149).

Yet as we have already noted, Polanyi’s heterodox uses of quite familiar words or phrases and concepts such as ‘true,’ ‘real,’ ‘rationality in nature,’ and ‘intellectual beauty as a token of reality’—especially this last—have brought down upon him charges of obscurantism, mystification, and mysticism. Here we must undertake to show not only what this last phrase may mean, but how it is possible to claim that the “rationality of nature” and the form of this rationality are portended in the intellectual beauty of scientific theories and of mathematics.

In order to deal with those problems it is necessary to refer to earlier stages of my argument. I have said in discussing the meaning of my own phrase ‘metaphorical intentionalities,’ that it is not outlandish for us to think of our mindbodies themselves as metaphorically intentional—insofar as they are alive and persist in being from moment to moment, continuously integrating their particulars to the totality that each is, in accord with their own inherent logic—their beating hearts, in their altogether worldly and palpable beat itself, embodying a dynamic, intentional, from-to, temporal gestalt bearing us forward in the world in and upon their very particular and changing rhythms. This in turn led me to assert, further along in

the argument, that the most archaic sense we have of 'form,' 'whole,' and 'meaning' is grounded in the unreflected integrity and natural gestalt of our intentional mindbodies. If this is so, then first and last, the touchstone of reality dwells, unreflected but not unknown, in the integrity of our mindbodies. Our sense-making within the world is thus the conjugal meeting of the archaic sense of order, form, and meaning of our mindbodies with something in the world answering to these mute axioms of significance. Neonates, uncomprehendingly preparing themselves in a *pas de deux* to the accompaniment of the sonant rhythms of maternal speech to dwell more fully in the profounder ambience of meaning and reality afforded by what will become their native language, are guided by their reliance on the form, integrity, meaning—now we must add, beauty—of their own mindbodies and upon that that answers to it in the mindbodies of others. Helen Keller, enraged by the discord, asymmetry, and disordering occasioned by the interdiction by blindness and deafness of the natural language-learning process, nevertheless relied upon the still intact form, rhythm, natural gestalt, harmony, and—yes—beauty of her own mindbody in order to dwell in that of her teacher, Annie Sullivan, to the end that she might achieve a new integrity and objectivity through participation in the order and significance of the real, made suddenly at-hand with the discovery that things have names and quite as suddenly inflaming her intellectual passions for a yet profounder grasp of the rationality of the world. Our earliest mode of communicating with the world is by dwelling in the order, form, integrity, and beauty of our mindbodies. Yet this was equally so with Einstein, rendered "asymmetrical" and "off-balance" by his perplexity, at the age of sixteen, over what would happen if an observer kept pace with a light signal propagated by him. He relied upon his intentional mindbody within its ambience—which included at least the form, meaning, and beauty of the articulate systems of Copernicus, Kepler, and Newton, no less than his own powers of mathematical imagination and intuition—to achieve in the theory of relativity a new integration for himself vis-à-vis nature.

These mute axioms of significance are always with us, even prenatally. We rely upon them to reach out to reality in ever more profound ways by becoming more congruent with its inexhaustible order, form, and meaning, thereby becoming more concordant with ourselves—that is to say, becoming more real.

Our mindbodies, among whose existential modalities are form, order, meaning, and beauty, are the paradigms of the real. The mindbody pre-

tends the *figure* it focally apprehends even as it is retrotending itself as *ground*. That in the world or in our descriptions or theories of the world that manifests form, order, meaning, and intellectual beauty to our “beholding” mindbodies *retrotends* the archaic and mute axioms of significance upon which we noetically and existentially rely. Therefore the tacitly known reality for us of our mindbodies *pretends* the reality (that is, the bearing upon reality) and the truth (that is, the heuristic power and ontological reach) of a theory possessing intellectual beauty. Hence, “the intellectual beauty of a theory is a token of its contact with reality” (*PK.*, p. 145).

Is then, *ab initio*, the intellectual beauty of a theory an infallible guide to reality? Are our mute mindbodily axioms of significance to be uncritically trusted? Even psychotics, after all, obey these demands for sense and equilibrium. The answer is of course no, it is not an infallible guide; no, they are not to be uncritically trusted—at least in the end. These archaic intellectual hunches are usually announced by their authors in a convivial setting, with universal intent, and are therefore immediately and justly vulnerable to criticism. Yet there is no rule that an author may apply to determine when he must abandon his initial acritical obedience to his inspiration. Many an inquirer has been faithful unto death to a theory that led nowhere. Only by disregarding the demurrers of Osiander did Copernicus persist in believing that his theory was about reality, thereby making possible a yet more profound adit into nature’s rationality through the work of Kepler, Newton, and Einstein.

Our intentional mindbodies, subject to genetic defect, pathology, subjective grandiosity, and death, are very fallible guides indeed. Yet, again the crushingly obvious fact that modern thought has systematically refused to acknowledge in its epistemology and that therefore has to be asserted still another time: for incarnate men there *is* no infallible alternative, no skeptically induced, formalized methodology that can impersonally warrant its own impersonality, hence its own infallibility. And an unrelenting insistence upon one, contrived into our careless and false accounts of doings and knowings, has certainly confused us; nor can it in practice save us from the inherent riskiness of or absolve us of our personal responsibility for our knowings.

Having embraced that picture of ourselves as knowers and doers in the world whence our tonic and intentional mindbodies have been abstracted, educating a global skepticism concerning the bearing of our theories upon a hidden reality—the principal guarantor of which is our archaic sense of a

Reality the nonexistence of which is inconceivable—we find the response of modern positivism the natural one. Under the impetus of this skepticism there also followed a complementary principle: the principle that the certain way to understand any given subject or entity is to analyze it into its so-called simpler components. Ontological skepticism and reductionism not only complement one another; each serves to reinforce the grip upon the imagination of the other. The outcome of this reductionism is, as Polanyi eloquently says, that “law is no more than what the courts will decide, art but an emollient of nerves, morality but a convention, tradition but an inertia, God but a psychological necessity. Then man dominates a world in which he himself does not exist” (*P.K.*, p. 380).

The result? Positivism not only denies justification to transcendent values; it denies the real existence of entities that comprehend a set of particulars, alleging instead that *simple* entities are all that really exist. Therefore it is hardly surprising that positivism, immured in its picture of ourselves as knowers, would find meaningless Polanyi’s words when he says “Looking *forward* before the event, the act of discovery appears personal and indeterminate. It starts with the solitary intimations of a problem, of bits and pieces here and there which seem to offer clues to something hidden. They look like fragments of a yet unknown coherent whole” (*T.D.*, p. 75; emphasis in original).

As we have seen, the denial of the reality of comprehensive entities is complementary to the Machian denial, in his *second-order theory*, of the reality of rational structures in nature that reason may intuitively grasp by relying upon tacit clues. To claim otherwise against Mach is to say that the mindbody comes to comprehend such entities in its own acts of acknowledging affirmation—in its own claims of knowledge, in short—by going beyond these clues, tacitly dwelt in, and by relying upon its own nature whose archaic existential modalities are form, order, meaning, gestalt, thereby making contact with their reality.

In order to illustrate Polanyi’s at times mystifying, and among some, suspect, views on our power to achieve greater objectivity by more fully penetrating the rationality in nature—as, in his view, Copernicus did—we can take the following case.

When I recognize a familiar face—even when I recognize that there is a *face*, something that, after all, as a neonate I had to come to be able to do—I attend from its several features, tacitly known, in order to see the face that these features jointly mean. The face is more real than its particulars: it possesses a more plenary power to manifest itself in ever new

ways. The act of attending *to* the face from its several particulars, tacitly indwelt, is the exercise of a more ample form of *rationality*; I here grasp a larger coherence than in merely attending to its particulars. To know the face is to achieve a greater objectivity than I achieve when I only dwell *explicitly* in its particulars. Thus the beauty and the promise of profundity of a theory (its coherence, its power to raise objectivity to a new level) stand to the celestial timetable (upon which both Ptolemy and Copernicus relied, but in which the latter saw portents of a larger coherence) as the face emerging into my comprehension stands to my reliance upon its particular features. This, I think, is what Polanyi means in uttering the rather cryptic: "[A] theory has an inarticulate component acclaiming its beauty, and this is essential to the belief that the theory is true" (*P.K.*, p. 133). And the same *logic* obtains *in the structure of my act of comprehending* a face by dwelling in its features, as obtains in the *structure of my act of comprehending* the intellectual beauty, profundity, the greater objectivity of the Copernican theory or the theory of relativity.

XIV

For its orientation to its environment any sentient creature is able to rely upon the intentional, natural gestalt of its own integral order, form, rhythm, and stability. Such “comprehension” as it achieves in doing this—primitive or sophisticated—is dependent upon this reliance. This is of course no less true for ourselves, albeit our sentience and orientation are irreversibly changed by our acquisition of speech.

We have come to see that even as speaking mindbodies we continue to depend upon our own existential form, order, rhythm, and natural gestalt (though the dependency has now become reflexive and recursive). And as we speak, apprentices that we are to the convivium of the speakers of our native language and therefore initiates into practice, into *a* practice, into what *is given to being done* there, we tacitly depend upon the form, order, rhythm, sense, and meaning that appear in that practice as the conditions for orientation, comprehension, assent, or dissent at a new and higher level of complexity and equivocation. The form, order, rhythm, sense, and meaning that appear in this practice can, in reflection, be explicated and formalized as the rules, among others, of grammar, syntax, and semantics, of rhetoric and of logic.

Obviously the particulars that enter into the world’s being made sense of by us within the context of speech and into our making sense to one another in this context are too complex to be profitably detailed beyond a certain point. The practices of our speech-community include, inter alia, certain habitual modalities for inducing assent in others and certain means of coherently expressing assent to and dissent from particular meanings that are before us at a given time. After these practices have been reflected, they may be called the strategies of rhetoric and the rules of grammar and logic. The tacit presence of the practices before reflection upon them

contributes to our orientation and comprehension; and when they become, after the achievement of literacy, the objects of explicit scrutiny and codification, they are identified as rhetoric, grammar, and logic. It is then that they may become the archetypes for the nature of rationality as such, the model expression and representation of sense-making and the hanging togetherness of things. It is not obvious, when this stage is reached, that we should choose one of these to the total exclusion of the others as the single paradigm for the *form* of the hanging togetherness and the *form* of the making sense of things for us. Even if we confine ourselves only to these three, it is clear that the art of uttering verbal formulae that are intelligible in the convivial setting of a given form of life (grammar), the art of choosing those formulae that are most likely to be heard and to move their hearers to attend in certain desired ways to certain significances (rhetoric), and the art of consistent assertion and entailment (logic) are, together with many other factors comprising our form of life, equally fundamental conditions for sense-making within the context of speech. Each element contributes to the process something essential to but different from the others. And this is because we are not born into the world already programmed with a conception of a reality standing between men nor do we have it handed to us complete and articulated after we arrive. Instead, sentient, motile, capable of a high degree of sense-making in the fact of our orientation alone, we arrive on the scene already such beings as are capable of initiation and apprenticeship to a convivium of our fellows, with whom the achievement of conviviality begins in the exercise of the most rudimental powers of our mindbodies and proceeds laboriously over time toward the realization of our highest powers as human beings.

The superordination of formal logic over the others as the archetype of the form of sense-making and of reason is very largely the exercise of a cultural option in our history, for good and ill: for good, in articulating the forms of consistent assertion and entailment; for ill, in alienating this by abstraction from the mindbodily matrix of all meaning in its setting amidst the praxis of a convivium, in relation to which it properly enjoys no privilege. Perhaps it was exercised when Plato made a clear distinction between what the Socrates of his later dialogues was about, namely, seeking through the medium of his theory of ideas to discover a grounding of justice and the good that he believed would be more substantial than just its contemporary usage, on one hand, and the mere idle and over-clever disputatiousness, with no aim beyond worsting one's opponent in argument, that he imputed to the Sophists, on the other. And when Aristotle, his

desiderata and his questions set by Platonism, explicated both the art of persuasion and the art of sound argument in his writings on rhetoric, logic, and dialectic, he laid the basis of this superordination. Walter Ong has observed: "The relationship between rhetoric and logic over the ages has been partly reinforcing and partly competitive. Rhetoric overshadowed logic in the patristic age, yielded to it more or less in the Middle Ages (though rather less than even scholarly mythology today commonly assumes), and overshadowed it again in a different way in the Renaissance."¹

Perelman,² in his writings on rhetoric with Olbrechts-Tyteca, has made a strenuous effort to redress the overwhelming imbalance in favor of formal logic as the (preeminent) paradigm of reasoning within the Cartesian tradition. Descartes, with his dictum that a clear and distinct idea would be an indubitable premise of thought, the sheer clarity and distinctness of which would be irresistible to the (in Descartes's second-order account, essentially discarnate) mind, was able to dismiss all disputation concerning clear and distinct premises; whereas disputation over premises had traditionally been the domain of dialectic. This move being made, there was no place for argument, only room—at least in this second-order account of reasoning—for drawing necessary conclusions from indubitable premises in accordance with inference rules. Perelman sees this and rightly reminds us that "deliberation and argumentation are opposed by their very nature to necessity and evidence. . . . The domain of argumentation is that of the likely, the plausible, the probable, to the extent that the latter escapes mathematical certitude."³ From this premise, in his *The New Rhetoric*,⁴ he embarks upon a full-scale effort to rehabilitate rhetoric as the domain of argument—as the domain, that is to say, where propositions that are only *probable* are commended by means of various rhetorical strategies to the actually existent mindbodies of the members of an audience. He says: "The object of the theory of argumentation is *to induce or to increase the mind's adherence to the theses presented for its assent*."⁵ Neither here nor elsewhere in the text of Perelman's book does he fully recognize the fateful Cartesian contrast into which he slips and that gravely flaws his anti-Cartesian efforts: the contrast, namely, between the "minds" of the members of an actually existent audience whose adherence to a thesis may be *induced or increased* by argument and the "mathematical certitude" of Descartes's essentially *discarnate* mind confronted by a "clear and distinct idea," to which its adherence is instantaneous and irresistible so that it is inconceivable that conviction could be increased *by any means*. Whereas of course if we do not conceive the mind as being discarnate as Descartes (and

also Perelman, unwittingly) did, without a history, without a mindbodily convivium, without a life anterior to reflective lucidity, then we know that its “assent” has *always* to be induced in the course of its history, in the setting of its convivium.

Perelman’s own suppressed premise, for all his avowed anti-Cartesianism, is then uncritically Cartesian and it gives back almost everything that it has sought to claim from Descartes. For Perelman covertly assumes that, if rhetoric and even if dialectic are to have any force, the form of argument must get a grip upon the mindbodies of the members of an actually existent audience, whereas he tacitly holds that the force of *logic* depends only upon the application of formal rules of inference to premises for which our assent has already been irresistibly hence inevitably granted, because it is a merely “intellectual” assent. The “necessary” and the “evident,” for Perelman, certify *themselves*; the “probable, the plausible,” require the certification of the mind’s adherence, which can have been only *rhetorically* induced, that is to say, induced by the temporally distended and historical use of rhetorical devices by a speaker cognizant of the actual situation of an audience. The view of this residually Cartesian anti-Cartesianism is that the mind is *persuaded* of the plausible; it is *convicted* by the clear and distinct. The first takes place in time and takes time; the second occurs instantaneously in a dead slice of (visual) space. Such is the malign work of the mind-body dualism, alive and well in the thought of an anti-Cartesian!

In other words, Perelman wishes to broaden Descartes’s conception of argument, hence of logic. But he does not subject the limited Cartesian conception itself to radical criticism: to the criticism, namely, that the self-evidence of the self-evident and the logical necessity of the logically necessary, be they ever so abstract in the logical calculus or mathematical notation in which they are expressed, have, *in the end*, no other ground or warrant than that afforded by the matrix of all meaning—the existing mindbody, in its convivial setting, which intends, comprehends, and makes acknowledging affirmations concerning what is true and valid, *however routine these acts may be imagined to be*.

I am claiming, on the contrary, that order, form, meaning, sense, and logic are portended in the natural gestalt of our intentional mindbodies, and that if they were not, then they could not make their novel form of appearance at the level of reflection. I am claiming too that this quite possibly obvious claim, when made, greatly attenuates the grip upon us of the conception of logic as an exhaustively explicit calculus and that uses of ‘logic’—the forms of the hanging togetherness of things for us and the

forms of the making sense of things to us—need not be exclusively modelled upon that of the particular form of hanging together and the particular form of making sense found in explicitly formulated propositions whose relations with one another are governed by formalized rules. Finally, I am claiming not only that this is true, but that it is philosophically important in ways all but ignored by the philosophic tradition.

But what then of what Wittgenstein has called the presumption of the “hardness of the logical must”?⁶

‘Logically necessary’ is an expression that, when it is used with some strictness, as in the colloquies of the modern philosophic tradition, has usually served to characterize the standing in our discourse of a certain proposition, given the assertion in that discourse of some other proposition. For example, two propositions that are said to stand with one another in the relation of implication could be symbolized simply by $P \rightarrow Q$. This means, *inter alia*, that their relation is such that if P is true, then Q is *necessarily* true, and that if Q is false, then P is *necessarily* false.

Long before the rise of literacy, which gave rise to many forms of skepticism and hence to the criticism of language, there was of course embodied in speech-practice that tacit formal order, later to be explicitly identified by grammarians, rhetoricians, and logicians. It was the latter who educed from this practice the rule, for example, that “it cannot be the case that $P \rightarrow Q$; P is true; and Q is false.”

Now does the above description of the fact that coherent speaking is subject to practice, to a practice, to generally being done in a certain way, in and of itself, commit us either to a rigid or a flexible picture of the “logical must”? Let us see.

Earlier in the course of a phenomenology of the isolate experience of seeing, abstracted into a certain picture, we found that none of the sensuous particulars simultaneously present before my eyes in a slice of dead (visual) space either arrived or departed, since the “time” in which they are imagined as appearing is in fact an eternity. Therefore, we say, they stood in the relation of necessity to one another. By analogy, the valid conclusion to a three-term syllogism is co-temporaneous with its major and minor premises, if they are imagined as standing in an eternal text—quite apart from whether or not the conclusion has been “drawn” by anyone. Logical relations that tacitly inform speech-practice as it unfolds in time and that our ears hear, subject to all the contingencies of the actual oral-aural reciprocity, come to be imagined, when made explicit, as eternal, written in an eternal but finite text for our “eyes” to *behold*, and therefore

are *fixed* as are the relations among the simultaneously co-present particulars of vision.

However, in our analysis of the audial world, for which our model was Bach's First Prelude, we discovered a different picture of the connectedness of things, the picture, namely, given by saying that the notes C, E, G, C pretend E, G, C and that E, G, C retrotend C, E, G, C. And I characterized these relations as logical, even though they are in time, because of a different conception of necessity that the analysis yielded. This claim was possible because the constituent notes of the Prelude were subject to the suasions of the eight-tone scale, itself in turn bound in a certain way by Bach's musical inspiration. The contrasting case of aleatory music, in which it was theoretically imagined that no note is subject to any suasion whatever, hence that every note is absolutely contingent, served to underscore that sense of necessity appropriate to the relations among the notes of the Prelude. In contrast to the "hard" necessitation of the relations of particulars in the visual model, the necessitation in the audial world could be called "soft," since it is temporally distended. At this point, it may well be asked: "Soft necessity—what is that; can it really be necessity?" Answer: "It is real necessity, *in the sense of 'necessity' derived from the analysis of the Prelude.*" "Yes, but is that real necessitation?" "Well, what do you mean by *real* necessitation?"

Our analysis of the oral-aural reciprocity disclosed that my speech-act is subject to the suasion of the grammatical, syntactical, and semantical "rules" implicit in the practices of our speech-community and, as such, is under the sway of a "soft" necessity; yet at the same time, as a novel act of owning the tokens of our language, *as mine, on this occasion, before you*, it is absolutely contingent.

Clearly, there is "room" for improvisation within the limits of the "soft" necessity of the eight-tone scale as there is not within the eternal framework of my visual field, as described. And yet there is infinitely greater "room" for such within the "soft" necessity provided in the formal order of the practice of a speech-community. The compilation of the *Oxford English Dictionary* "on historical principles" attests to it. The "hardness of the logical must" is provided by the picture, so easily introjected from the experience of literacy, of a very long, immutable text in which all of its particulars and their relation are simultaneously and "eternally" co-present—in the sense that they are all equally present at and accessible in a given "moment," which moment is really eternity: a dead slice of (visual) space.

'Logical necessity,' then, is *context-relative*: its context being, broadly,

form of life, or more narrowly, language game. Is it binding? Well, is the eight-tone scale binding? Is our speech-practice binding? Does it weaken the authority over you of the meanings of the words defined in the *Oxford English Dictionary* to entertain the dizzying reflection that, not having been copied from some eternal text, their meanings are certified by nothing more substantial than a long history of their backing among English-speaking people? "So you are saying that human agreement decides what is true and what is false?"⁷ No, I am not. "It is what human beings *say* that is true and false; and they agree in the *language* they use. That is not agreement in opinions but in form of life."⁸ And I am saying, too, that the language we use was not cribbed from some eternal text, nor was our form of life imposed from on high. We were born into it and early on came to take it up as our own, beginning with our neonate *pas de deux* with our mothers' speech in the first hours of life. And in due course we came to acknowledge, having acknowledged many other things along the way as prolegomenon and condition, that "it cannot be the case that if $P \rightarrow Q$, and P is true, that Q is false"; and also that " $E = mc^2$."

The "logical must" with which we are now left, deriving from the picture of the oral-aural reciprocity, is "softer" than that provided by our abstract picture of vision. And yet it is quite "hard" enough to do what is required (indeed, it is *as hard as it can be*) without bewitching our imaginations as the older view has done.

Even as these meditations have, over and over, reflexively animadverted upon the uses of logical terms—both those uses to be found in the philosophic tradition and the innovative uses to be found in the writings of Polanyi—so they have obliquely implied the changed conceptual matrix of the terms 'reason' and 'rationality.' In many passages, especially those in which appear the expressions 'the form of the hanging togetherness of things' and 'the form of the making sense of things,' which were used to preserve a sense of the family resemblances among uses of the word 'logic' while loosening the informal rules that in practice govern them, the concept of reason might equally have been under scrutiny. What was said of uses of the concept 'logic' could have been said *mutatis mutandis* of the concept 'reason.' You will remember that in these contexts I have resorted to the above vague expressions in order to avoid using 'logic' itself, in the midst of my critique of its rather more restricted uses in the tradition. I felt that the colloquial 'hanging togetherness' allowed me to suggest that different sorts of things can be seen to cohere, to comprehend particulars, exhibit order, have a logic, imply and be implicated with other things in

terms of many different models, while avoiding a rigging of the discourse overwhelmingly in favor of (formal) logic. And, especially in the examination of the concepts 'necessity' and 'contingency,' first in relation to a report on an analysis of seeing and then in relation to one on hearing, logic—the forms of the hanging togetherness of things—came to be seen to have several different and equally legitimate uses.

All of the foregoing argument and analysis can now be turned to a more explicit criticism of the nature of reason, as we may now wish to conceive it, in view of Polanyi's innovations. In stating our question thus, I run the risk of seeming to speak in the material mode rather than in the formal mode—that is, speaking in a first-order way, as if reason is a "something," a faculty alongside other human faculties, rather than speaking in the second-order way about words and their use, observing that the words 'reason,' 'reasoning,' 'rationality,' 'reasonable,' and the like are all, together with others, words used variously in different contexts to call attention to the nature of certain forms of human activity. Nothing could be more antipathetic to the spirit of Polanyi's conceptual innovations than to think of rationality as a characteristic or quality of a faculty or of a substance. If we think of reasoning as one of several activities and of rationality as one of the dispositional properties of people, then 'rationally' will clearly retain its adverbial sense, which is, I think, desirable. G. J. Warnock's caveat is surely well issued when he says:

What, then, is reason? Alternatively, what is reasoning? It seems scarcely possible to maintain that these questions can be given definite answers. The definitions, implicit or explicit, of the relevant terms that have been employed by philosophers and other writers vary widely and significantly; and, while some may be judged preferable to others, or may adhere more closely than others to senses which the terms may bear in ordinary discourse, there seems to be no basis secure enough to support a pronouncement that a particular meaning and hence a particular answer to the question, is exclusively correct. In any case, what is important to the understanding of philosophical writing on this topic is not that one should know what "reason" means but, rather, that one should discern, so far as possible, what meaning is attached to 'reason' by the author.⁹

It seems to me important to investigate the status in our second-order accounts of the form of rationality—in contradistinction to the actuality of our first-order "rational" doings—of the perhaps sometimes question-

beggingly neat distinctions between theoretical reason and practical reason.

The foregoing analysis, you will remember, has led me to conclude, *inter alia*, that our mindbodies are the omnipresent, radically inalienable, and logically necessary matrix within which all our acts of meaning-discernment are conceived and brought to term, no matter how abstracted from this matrix are the vectors on which they are borne. Having come to hold this premise, I have inferred that our sense therefore of the form of the hanging togetherness of things and the form of the making sense of things have their archaic root in this matrix from out of which they manifest their primitive forms in our sentience, ordered motility, and orientation in the world to appear in due course as our highest powers mediated through our reflective instruments: “natural” languages, formal logic, and mathematics — which, I have held, are generated out of our mindbodies. And these things I have claimed, in spite of the fact that to common sense it would appear that they could not be otherwise, and therefore could need no further advocacy, because I believe that our Enlightenment accounts of our doings, a genus of which is our knowings, have not taken this with sufficient seriousness.

To a large extent, my puzzlement over Polanyi’s unannounced innovations in his uses of concepts such as ‘assumption,’ ‘premise,’ ‘presupposition,’ ‘logic,’ ‘rule,’ ‘method,’ and ‘procedure’ has led me in this direction. In the course of trying to exegete critical passages of *Personal Knowledge* having to do with believings and valuings as premises of scientific inquiry (*PK.*, p. 161), with the presuppositions of factuality (*PK.*, pp. 191ff.), we have been driven to new models for the uses of logical concepts.

By now it should be amply clear that when Polanyi bent to his own philosophical uses the account by gestalt psychology of the structure of the irreducibly dynamic relation between any given ground *from* which we attend to any given figure *to* which we attend, and in doing so took that dynamic structure to be ontologically grounded, not merely in a spontaneous physicochemical or neural equilibration, but in the comprehensions of the tonic mindbody itself, within the temporal, tensive thickness of its world,¹⁰ there were already portended the aforementioned conceptual innovations. If it is claimed that feats of seeking, coming to know, and making acknowledging affirmations are inherently intentional, as is the tonic mindbody itself who performs them, then their particulars will stand to one another and to the whole that they jointly comprise and mean, not as the particulars in a slice of dead (visual) space, but in a distended moment in time, however abbreviated

—as do the particulars of my act of pointing to a bird in flight.

But, as we have seen, the particulars upon which I rely and the whole in which, by this reliance, I come to dwell have a *logical* no less than a *temporal* relation. And it is possible now to make this claim, since we have found that we may say of the temporally distended particulars of Bach's First Prelude not only that they precede and follow one another in time but that they are subject in their temporal relations to the logic, that is, to the motif, of the eight-tone scale, bound by Bach's musical inspiration. The particulars jointly mean the whole, and the relation of each particular to all the others is governed by this logic. In a timeless world, as we saw, no thing could intend some other thing—as no visible particular can intend any other, nor with others jointly intend a visible whole in the dead slice of (visual) space. If therefore I intend what I am coming explicitly to know *from* what I am tacitly knowing, the *from* and the *to* will have to have at once a temporal (be it ever so brief) and a logical relation to each other. The puzzling passages on pages 161–62 and 191–92 of *Personal Knowledge* are, then, themselves inferences that Polanyi tacitly draws from the very premises borne in the metaphorical intentionalities of the language he uses, in which are disclosed to him, through its use, the irreducibly dynamic mode of his own mindbodily being. And *this* was of course itself prereflectively “in the world” as the antecedent subject of what he was in the process of saying, the medium of these very metaphorical intentionalities, about his own knowings and doings in the world. For it was here that the picture that he both *had* and was *in the midst of* was lodged. *Having* and *being in the midst of* this picture informed his mode of being in the world. Being so disposed, it was “natural” for him readily to appreciate the larger philosophic import of the discoveries of gestalt psychology—just as being otherwise disposed by a different picture lodged in different language made such an appreciation unlikely for the original authors of the theory. Hence Polanyi was able to make this import a more comprehensive part of a postcritical theory of knowing than the gestaltists could have imagined.

All of this being said, it is clear that if the tonic mindbody is the omnipresent and inalienable matrix within which all our acts of meaning-discernment are conceived and brought to term, if, that is to say, the new picture of ourselves as beings in the world actively engaged in asking, seeking, finding, and affirming clearly situates us in the moil and ruck of the world's temporal thickness, marinating there in our own carnal juices, then our rationality can only appear here, inextricably consanguine with

our most primitive motility, sentience, and orientation. And theoretical reason, the highest form of which is expressed in pure mathematics, no less than practical reason, most archaically expressed in our sentience, perception, and orientation in the world, is implicated with the dense temporal and tensive warp and woof within which we dwell.

Now, who has ever denied this, who has ever wished to deny it? Even Plato, beholding his teacher Socrates, drinking his companions into insensibility in the agora of Athens at the Stoa of Zeus, while preserving his own lucidity until dawn's first light, would not likely, even at that moment, have wished to do so. Yet Plato in some passage, e.g., in *The Republic*, in *The Phaedrus* myth of the charioteer with his dark horse and fair horse, seems to believe that *nous*—at least “eschatologically”—will have untrammelled access to the very forms of things. The metaphorical intentionalities of his language made it so.

What is here to the point, however, is that few in modernity have gone so far as this—even though the “honied head of Plato” has been an ever-present lure. Indeed Descartes himself only barely explicitly says so much. Since no one has denied that reason is incarnate, no one can quite be held to account for having done so. In fact, it is in the picture of ourselves that we both *have* and are *in the midst of*, borne in the metaphorical intentionalities of our language—which no one in particular has fashioned after a deliberate and lucid decision—that the systematic denial is made.

What then can we say in light of this about the theoretical reason—practical reason distinction?

Once again etymology will be of some assistance. The radicals of both ‘theoretical’ and ‘practical’ are Greek verbs. In the case of ‘theoretical’ the verb is *theoreo*, which means “to look at,” “view,” “behold”; and, when used of the mind, “to contemplate,” “consider,” observe.” It is also used to characterize what spectators do at public games: they view from a distance. ‘Theory’ is, then, intimately connected with the “physical” activities of looking, beholding, observing, seeing, and spectating, and by analogy, with the “intellectual” activity of *considering*. And in the activity of spectation the suggestion is that we are not participants but detached beholders.

In the case of ‘practical’ the Greek verb is *prassein*, which means “to do” (habitually) and has as a derivative *praxis*, which means “habitual action,” “practice.” *Prassein* can also mean “to achieve,” “bring about,” “effect,” “manage.” The suggestion here is of human activities much more involved in the immediate texture of the world than are those of inspecting,

beholding, and especially of considering. This should remind us of the distinction, used by Straus, between the gnostic and the pathic. By means of this distinction he observes, you will recall, that "in touching, the pathic is dominant; in looking the gnostic dominates. '*Looking at*' brings every object into the domain of the objective and general."¹¹

There is no gainsaying the usefulness of distinguishing between the ways in which reason is brought to bear upon the making of a decision or the effecting of a practical outcome, on one hand, and its functioning, on the other, in the solution of abstract problems, most of the terms of which can be explicitly formulated, as, paradigmatically, they can be in mathematics. However, the once valuable articulation of the disanalogies between theoretical reason and practical reason has long since required correction by an attention to the fundamental analogies between them. The preeminence of science, armed since the seventeenth century with mathematics, has quite naturally led us to exaggerate their differences in our second-order accounts. Even though Kant insisted, when his whole program of epistemological reform was complete, that practical reason has priority over the theoretical, the position of his first *Critique*, primarily concerned with reflective thought brought to bear upon cognition and science (*naturwissenschaft*), has been the dominant textbook of modern theory of knowledge, thereby superordinating theoretical reason as paradigm.

If there are family resemblances among the various uses to which the word 'logic' may be put, and if there are irreducible analogies among the states of affairs in the world that these uses are designed to elucidate, then the same will be the case in uses of 'reason,' whether modified by the adjective 'theoretical' or 'practical.' And this is why, drawing the inferences from Polanyi's conceptual innovations, I have claimed that the rationality of a being embrangled in the moil and ruck of the world's temporal density, be it expressed in an ever so abstract medium, is inextricably consanguine with our primitive motility, sentience, and powers of orientation. Between *speculation* and *contemplation* at one end of a spectrum and "unthinking" habitual *doing*¹² at the other, there is an indefinite number of ways in which the relatively detached, theoretical forms of reason's appearance can come into play with its less detached, more immediately involved, practical forms in a great number of different kinds of activities of the person in his world. A new formula, in its own way much too facile, may serve to redress our inherited imbalance. We may now usefully speak of reason (tacitly) *informing* all our *doings* in contrast to reason (explicitly) *governing* all our *considerings*, not neglecting to remember however that a *considering* is itself

a *doing* and that no *doing* is ever without its more comprehensive explicable context of meaning: not forgetting, in other words, that in the warp and woof of our activity in the world rationality appears now tacit, now explicit in an ever-changing interplay; and that it is only in our second-order accounts of reason that there can be achieved an artificial and therefore sometimes perilous because misleading isolation of its changing forms and manifestations.

Now obviously there can hardly be anything controversial about such claims. It is worth making them only because in our second-order theories as to the nature of reason we have so often rigged the case as to blind ourselves to these analogies. This theoretical self-blinding has unfortunately not been without practical consequences. To mention only some, it has led us to seek models of practical reasoning in ethics in which exhaustive formalization is sought, in obedience to the inherited paradigm that all true reasoning proceeds in this way—the corollary of which is the principle that “reasoning” that cannot be formalized is not reasoning. When such a program fails—and it (logically) must fail—we too readily acquiesce in the suggestion that, lacking exhaustive formalization, ethical claims are but statements of personal taste and ethical decisions are made irrationally. It is not a consequence of this, of course, that we are rendered incapable of making ethical decisions, nor that, when we do make them, “reason” would play no role, only that because of the nature of our second-order account, we shall have damaged our confidence that our decisions express more than mere transient “subjective” preferences within a very fugitive moment of time. Whereas if we appropriate the distinction between the tacit and the explicit manifestations of our powers of discrimination and appraisal—recognizing that where there are not such tacit powers there cannot be any explicit ones—then we shall be able to appreciate the rational process by which, let us say, a jury arrives at a verdict or a jurist arrives at a judicial opinion or, for that matter, the rational process by which I determine the meaning of a quite familiar word in the context of its actual use in a quite ordinary colloquy.

This sharp dichotomization of theoretical and practical reason through overlooking the analogies between reason’s various manifestations has another practical consequence. The superordination of theoretical reason, Kant’s dictum notwithstanding, its status as an epistemological model enhanced by its association with the prestige and manifest success of the physical sciences, made not only ethics, metaphysics, and religion suspect as mere subjectivistic woolgathering; it often drove psychology, sociology,

and politics so to define their subject matters as to allow for their study in accordance with "strict, scientific methods." It drove these inquiries, in other words, to define their subject matters in such fashion as, by implication, to deny the existence of the *psyche*, of the *socius*, and of the *polis*. Even so, psychology, sociology, and politics did not disappear. The mere fact of there no longer being, strictly, any logical place for the subject matter within the explicit formal limits of the new scientific methodology was no inhibition. The inherent interest for us of the *psyche*, of society, and of politics—the arena of human action—as manifestations of our human, personal context, is so profound, the demand for a more generous coherence of things so exigent, that the subject matter has been tacitly and surreptitiously reintroduced, outside of the formal limits of explicit methodology, by the investigator who could not after all wholly deny his own exigent mindbodily demand for a larger meaning. Even so, laboring under this built-in contradiction and under the irrelevant strictures imagined to be imposed upon these inquiries by "strict scientific methods," their practitioners have come more and more to articulate their problems in the shadow of their own formal methodologies. The results have often been that the tacit common sense, that had redeemed the inquiry from emptiness at the outset can now increasingly assert itself only with greater and greater difficulty; and the "findings" of inquiry therefore become more and more trivial.

As for *litterae humaniores*, the angst is more open and, if acquiesced in, issues in the profoundest of ironies. For the contradiction between the true subject matter of a great work of fiction like, let us say, Faulkner's *Light in August*, and a computerized word study of its text, undertaken in order to lend the air of legitimacy to it and to its study, is almost the ultimate irony of our bondage to the Cartesian Enlightenment.

To be sure, the way in which the spectations of our own first-order expressions-in-practice of our various forms of rationality affect this first-order practice is rather indeterminate. As we have seen, Ernst Mach's positivistic account of scientific knowing did not seriously inhibit his first-order practice of science. Nor did Francis Crick's orthodox empiricist philosophy of science¹³ prevent him from discovering, with James D. Watson, the DNA double helix—though strict obedience to the requirements of that philosophy would have done so. Nevertheless, it does tend to confuse us as to how it is they made their discovery. However, even if the practical consequences for our first-order activities of our erroneous second-order accounts is indeterminate, there is no doubting that there are such consequences.

Surely the most fateful of these is that our human being has become increasingly problematic over the last three hundred years. Man can be seen to be sentient, oriented, motile, intelligent—in short, intentional—performing feats of judgment, evaluation, and discovery, making acts of worship, only at the level of his first-order activities; while all this is rendered invisible in our second-order accounts of them. For in this account, alienated from the ubiquitous intentionality of our lively mindbodies by the picture we both *have* and are *in the midst of*, we behold these activities as if in a dead slice of (visual) space in which, as we have seen, they cannot appear.

Philosophical anthropology has thus been prevented from taking these facts about ourselves seriously through the tacit operation of twin policies: the policies, namely, of *trivialization* and *denial*. On the one hand, these facts have been trivialized by being *too readily* acknowledged: we say, “Yes, of *course*. These facts are obvious; *everyone* knows them—the most *ordinary* things in the world”; and because they are ordinary—in other words, known to us simply because they are imbedded in our routine practice, rather than as the outcome of systematic reflection—we conclude that they could not possibly have any serious philosophic import, inasmuch as, since Descartes, only that knowledge is taken to be serious that is the issue of a skepticism raising us, so it is imagined, above our history and practice. Having acknowledged them in *this* way, we then feel at liberty to forget them. On the other hand, we can now concern ourselves with the *extraordinary*, with, that is, that which can be known only as the fruit of a heroic skeptical inquiry, which of course issues in the regnant second-order account wherein these facts are tacitly denied. In terms of our picture, then, the facts that attest to our uniquely human being in the world are alternately held to be *trivial* or *nonexistent*; each view in turn tightens the grip upon us of the other.

XV

A further look at the Cartesian vicissitudes of an anti-Cartesian critic—we have earlier seen the perils besetting Perelman—will disclose the ubiquity and effect of that picture *having* and *being in the midst of* which holds us captive to the philosophical tradition. At this juncture, I fear, our project becomes quite explicitly—and for this I apologize—an attempt to make the obvious plausible.

“It is impossible . . . to have all of an utterance present to us at once, or even all of a word. When I pronounce ‘reflect,’ by the time I get to the ‘-flect’ the ‘re-’ is gone and necessarily and irretrievably gone.”¹ This claim by Walter J. Ong is made in the context of an attempt to sharpen the contrast between the spoken word and the printed one, between orality and literacy, because of Ong’s contention that the “economy of a world of sound is violently disrupted by the alphabet,”² and that the human sensorium is fundamentally shifted by the emergence of a print culture.

In a remarkable series of essays appearing over many years, Ong has engaged in an analysis of modern and contemporary culture by taking seriously and educing the implications of the fact that we have been, to use Marshall McLuhan’s name for it, creatures of the Gutenberg Galaxy. “The modern age was . . . much more the child of typography than it has commonly been made out to be.”³ The differences between cultures, in this view, are the differences in their sensoria, “the organization of which is in part determined by culture while at the same time it makes culture.”⁴ A culture that organizes its life and forms its imagination, in terms of motifs and metaphors drawn from its own accounts of the world of sights and seeing, drawn, in short, from a world that offers us the image of the word as paradigmatically something printed, therefore visible, enduring, and static, will be different *through and through* from one in which speech,

sound, and hearing are dominant. Ong's writings have richly documented that and how this is so.

While doing this, while showing the ways in which the deep-going Cartesianism and, derivatively, the positivism of this culture are rooted in the shift of our sensorium occasioned by the transition from an oral to a print culture, Ong obviously could not at the same time let his analysis bear self-referentially upon his analysis. He could not in other words show how the presuppositions of the ways in which he conducts his argument are themselves creatures of a print culture and how *this* fact issues in some truly extraordinary Cartesian and positivistic infelicities—not to say, incoherences—from one who, at least by implication, is an anti-Cartesian. This irony is all the more striking in view of the way in which time and again his analysis, as almost no other does, strikes to the very marrow of our imagination wherein a print culture has bred and husbanded our *ur*-Cartesianism.

We may then accept with gratitude and at face value the piece of cultural criticism that Ong has, with impressive literacy, wrought for us. But if we are to go beyond this, if we are to cut deeper into the sources and characteristic disorders of this culture, we shall have to bring some of the motifs of this criticism to bear upon itself. In doing so, we shall aspire to expose the Cartesianism in even so extraordinarily astute a commentator as Ong. For we may suppose that if this malaise is to be found even here, it must be ubiquitous and entrenched in the imaginations of the rest of us.

Yet even this task can be accomplished with relative ease. It is not difficult, after all, to show by dialectical means applied to certain typical cases the incoherences into which Ong falls because he is systematically immured in the conceptual matrices of the very culture upon whose conceptual matrices he is undertaking, unsuccessfully, as we shall see, to achieve a critical perspective. Such tactics bring no satisfaction unless they lead toward the deepening of reflection. To bring this about, some suggestion of a truly radical alternative to the standpoint afforded by the print culture itself is called for.

But first a word about 'Cartesianism' as I am using it. It is first and fundamentally not a set of articulated philosophical doctrines, but rather a *picture*, lodged with growing authority in the imagination of the West from the end of the Middle Ages on, that is the *presupposition* of such doctrines. This picture is comprised of a coherent system of mutually implicative images, metaphors, and analogies that represent man's relation to nature, to his own body, to the world of material objects, to time and history, to his

acts of reflection, to his decisions, to his intellect, *even to his own ego*; and these relations are analogous to the relation that God is conceived to have to the world that he has made out of nothing. Man is here depicted, in other words, as essentially disembrangled from, because transcendent over, and thus autonomous in relation to all of these.

Cartesianism is therefore older than Descartes by at least three centuries and has a life of its own quite apart from his philosophical texts. Some of the evaluations implicated with this picture are of course as old as Western culture itself. It is not however until the propagation of the image of a God who radically transcends the world, in the way that he who has created it out of nothing would, that there was formed and endorsed man's sense of having an exemption from anything *given* save only his act of reflection upon his own act of reflection.

All of these motifs converged in the explicit philosophical doctrines of Descartes: the radical ontological dualism of mind and body; the complementary epistemological dualism of the knower and the known. This "bifurcation of nature," as Whitehead has, with characteristic felicity, called it, meant that man as knower comes increasingly to be conceived as alien to, because estranged by abstraction from, and therefore quite incommensurable with, the material world that is the very object of his knowing. And this has meant that, animated by the energies and enformed by the images produced by a print culture, the paradigm of homogeneous because abstract (visual) spaces has been superordinated in our imaginations over the heterogeneities of concrete places.

Descartes, having officially declared the incommensurability of extended things and thinking things, was then quite unable to suggest a plausible way in which they might, even so, have some fundamental connection with one another. No one starting with the same picture of man's relation to nature, to his own body, to time and his own ego, and therefore being constrained by the logic of this picture, has been able to offer, in the three hundred years since Descartes, a more plausible suggestion as to how minds and bodies are to be brought together. During this time hardly any of our debates, explicit or by implication, over the nature of man in the world has failed to move, rather despairingly, back and forth between matter and mind, object and subject, the world as we cannot help fancying it to be, eternally in itself, and the world as it presents itself to us in our perceptions—or as that arch-Cartesian in extremis, Jean Paul Sartre, would have it, between *être en soi* and *être pour soi*.

As Cartesianism is abroad for a very long time before Descartes, so it

persists long after philosophers have shown the fundamental incoherency of his principal doctrines, and quite *in spite of their having done so*. This Cartesianism has a powerful grip upon our imaginations precisely because our subscription to it is only tacit.

Let us begin, then, by making the easy philosophical move in examining Ong's assertion above: "It is impossible . . . to have all of an utterance present to us at once, or even all of a word. When I pronounce 'reflect,' by the time I get to the '-flect' the 're-' is gone and necessarily and irretrievably gone."

Now I believe this statement is easily shown to be false. I shall in due course do just that. The question I wish however to put at this juncture is: how did Ong come to subscribe to this false statement or—more exactly—what led him to suppose that it is true? My assumption is that answering this will disclose a profound, that is to say, a systematic confusion having the character of depth: a parallax induced by the very culture that he both *has* and is *in the midst of* as he attempts to bring that culture into focus under his critical gaze.

In order to display the nature and source of this confusion I will concentrate attention upon two words in the above quotation: 'pronounce' and 'reflect.' I take it as obvious that *pronouncing* the word 'pronounce' and *pronouncing* the word 'reflect' are not the same as *writing* the word 'pronounce' and *writing* the word 'reflect.' I imagine the following scenario. As Ong thinks about what it is for him to pronounce and what it is for him to write he imaginatively entertains two pictures—one a picture of himself *pronouncing* 'pronounce' and 'reflect' and one of himself *writing* 'pronounce' and 'reflect,' this latter more closely associated with his actual contemporary feat of writing. I am not supposing of course that Ong explicitly draws out the lineaments of these pictures, nor that the tacit pictures that are ingredients in the integral process describable as "Ong thoughtfully engaged in writing" are more than rather indeterminate and fleeting bits of fantasy—though not on this account without their own internal logic. The controversy over whether or not (some) "mental events" accompany the so-called physical events of writing and speaking and, if so, of what kind, is wholly unedifying. When I am speaking or writing *thoughtfully*—whether in reality or in fantasy—*many* sorts of things are going on at once. The question as to which of these things that go on are "mental" and which "physical" is out of place. But it is certain that one of the elements present in this global situation of my *thoughtful* writing or speaking is *picturing* to myself—and not just visual picturings; there are audial, tactile, olfactory, even kinaesthetic

ones as well. The fragmentary picturings of my fantasy as I think, speak, and write enform the logic of my written-down and spoken-out words.

Insofar then as Ong does this he dwells simultaneously in—or he alternates rather equivocally between—two different pictures, in one of which he is depicted to himself as *speaking*, in the other of which he is depicted to himself as *writing*. In one of these he is placed in one relation to his words, in the other in another relation. To occupy both of these standpoints at once, even equivocally to alternate between them, is to risk the confusions caused by a parallax. In riflery if the constituent lenses of your telescopic sight are not properly aligned, even though you will see a perfectly clear image of your target, the target itself will not be in your line of view. This is a parallax. The lucid image you see is produced by the warping of the light that comes through the lenses. You are, in effect, seeing your target at once from two different points of view as if from a single one. Therefore you cannot be aiming at it from either. Inevitably you will miss—systematically.

The situation in which, in my scenario, I imagine Ong to be as he writes the above sentence is one in which the two pictures, though incommensurable, converge upon the words ‘pronounce’ and ‘reflect’—one pair being *pronounced*, the other pair being *written*. The trouble arises when the words that are used to elucidate the differences between *pronouncing* ‘pronounce’ and ‘reflect’ and *writing* them are the very words upon which Ong’s *picture* of himself pronouncing and his *picture* of himself writing converge. He “sees” the words ‘pronounce’ and ‘reflect’ both as *spoken* words and as *written* words.

When therefore he “consults” these two pictures to “see” what speaking and writing respectively look like in order that as he writes he may report on them—all the while failing to notice the operation of these pictures in his imagination, even more therefore failing to notice that, incommensurable though they are, they nevertheless converge upon ‘pronounce’ and ‘reflect’—the view that he comes to have is parallaxic. In this scenario the words ‘pronounce’ and ‘reflect’ are therefore at once “discernible” (as written) as “direct effects in space” and yet (as spoken) are such as vanish before they can appear (in space, *as this is paradigmatically conceived in a print culture*). From the standpoint of the picture of himself as *writing* Ong is led to want words to be present as they can be in writing; but he finds in the picture of himself as *speaking* that they are “gone and necessarily and irretrievably gone.” So he is led by this to say: “It is impossible to have all of an utterance present to us at once.” For the words of a speaking to be “present” and not “irretrievably gone” can now *only* mean for them to be

“discernible direct effects in space” — in that sense of ‘discernible,’ ‘direct,’ ‘effect,’ and ‘space’ governed by the regnant paradigm for their use in the Gutenberg Galaxy.

But there is still more bad news to be faced. The parallax manifests itself in yet more subtle ways. Ong has said: “[Speech] leaves no discernible direct effect in space.” I want to suggest in what follows that the way in which speech is *pictured* in this remark is such that, first, the statement cannot be about speaking and, second, speech (a speaking) is so characterized that there could not *be* any such phenomenon. Since the statement is obviously false, and since I cannot imagine that Ong believes that there is no such phenomenon as he purports to be speaking (writing) of, I conclude that some systematic confusion like a parallax is at work here as well. I ask myself: How could Ong have so construed *his own words* as to believe that they are true even though they are obviously false, and that they are about speaking even though they could not be? How is he thinking about speaking through the medium of the words “Speech leaves no discernible direct effect in space” so as profoundly to mislead himself? How do his words get in his way?

Well, to begin, let’s take ‘speech,’ a substantive, not a gerundival form like ‘[a] speaking.’ Not an auspicious beginning when you realize that the purpose of the sentence is presumably to sharpen the contrast between the static, enduring, “eternal” world of printed words and the dynamic, fleeting, temporal world of words actually being spoken. The substantive, ‘speech,’ heavily biases Ong’s imagination, we may conjecture, toward thinking of an actual speaking in static terms, toward thinking of words, its constituent particulars, as stable and of the relations among these particulars as “eternal” rather than temporal. But then this bias is immediately mitigated (but with fateful consequences, as we shall see) by the verb ‘leaves.’ We have here not only a verb but a verb pregnant with the pathos of transience. Speech, in other words, both *departs*, as does every moment of present time, and does so without issue. When it has departed there is nothing left behind. It leaves and leaves nothing. Such is Ong’s view.

On the one hand, then, Ong’s own language leads him to think of an actual speaking as “[a] speech,” comprised of static particulars without temporal thickness in themselves, nor in their relations with each other. The image is this: words torn loose from the visible but silent printed page, no longer at home either there or in the invisible but sonic temporal world of an actual speaking. Yet on the other hand it leads him, focusing now as he does upon the *endurance* of printed words in (visual) space, to

think of a speaking as, by contrast, so evanescent as to have neither duration nor issue.

Paradoxically—or rather parallaxically—Ong thinks of speech in such a way that it is too *static* to be in *time*; and at the same time in such a way that it is too *dynamic* to be in (visual) *space* (as printing is). It cannot exist for him as *something spoken* because he thinks of it as comprised of static, atemporal entities, separated by atemporal intervals. At the same time it cannot exist for him as *something written* because the words are so dynamic, fluid, and evanescent that they will not come to rest on the page in the way of the printed word: either words torn loose from the printed page or words that will not rest upon it. Were we to suppose that these two formulas exhaust the ways in which speech can be, then there would be no such thing, for neither of these is a speaking. But then we can be reassured in the thought that Ong is not speaking of speech as a *speaking* at all. For his own words make it impossible for him to do so. It cannot exist for him as a temporal series of words because by thinking of them as printed he deprives them of their temporality; and by thinking of them in terms of the paradigm for endurance of the *printed* word he deprives them of any duration. It is not surprising that there are times, as he is drawing the contrast between the two cultures, when he sees an oral one not as a culture in which people live their lives *talking* and *in talking*, but rather as one in which *there is no written language*: in other words, an oral culture is seen as a *preliterate* culture, on its way towards literacy, not *already* fully what it is in its own right!

Assume that the scenario I have devised plausibly accounts for the way in which Ong could be led to say what he did: the scenario, namely, in which I imagine him, as he writes, alternating between two pictures of his relation to his own words, of his mode of being in the world, in neither one of which [a] speaking is even conceivable—let alone accurately describable. We may then ask: What element would have *had* to be missing from these Ongian fantasies to have generated these particular incoherences? What addendum to these two pictures could bring them into accord with one another and with the actuality of our speakings? Quite simply, what is absent is nothing less than Walter J. Ong *for himself*, mindbodily in the world, actually speaking with voice and tongue, actually writing with hand and pen. Put him there and what has hitherto made less than no sense suddenly makes perfect sense—but then, of course, becomes a very different story, as we shall see.

Having alerted ourselves, then, to the existence of this parallax, let us

now deal quite straightforwardly with some of the exemplary statements in which Ong draws the crucial distinction forming the premise of his detailed analysis, the distinction, namely, between speaking and writing.

The first statement to consider is: "Words come into being through time and exist only so long as they are going out of existence."⁵ Elsewhere (*In the Human Grain*), Ong has put an analogous, perhaps stronger, case in a variant formulation. I say "an analogous" rather than "an identical" case precisely because of the variant formulation. "Speech," he says, "exists only when it is passing out of existence." The differences between these two statements may not be philosophically innocent. They could indeed become the source of some serious conceptual mischief. The temptation to suppose that "speaking" is the same as "causing words to come into being through time" is great in our downwardly reductionistic ethos. Therefore it is well for us to be clear about this as we proceed.

Before setting forth an elaboration of this warning, I propose to substitute "Speech exists only when it is passing out of existence" for the longer sentence, since, I believe, it gets us closer to what I take to be the heart of the matter for Ong, and therefore provides a better paradigm for analysis.

I have no discomfort in reducing the meaning of 'speaking' to "the sounding of a sentence" so long as we make an explicit decision to do so. Indeed at this preliminary stage of analysis I find it quite useful to do just this; to take the words '[a] speech' (or '[a] speaking') to be roughly identical in meaning to 'the actual sounding of a sentence.' However, before we are done I will wish emphatically to claim that '[a] speech' cannot be reduced to "the actual sounding of a sentence"—a claim hardly likely to be lucidly made in all seriousness, but nevertheless a view that our reductionism will incline us absentmindedly to take. For of course any depiction of man's viva voce use of language that performs this reduction, even—indeed, especially if—by default, is dangerous to our spiritual health. Any discussion of language use as man's singularity—however far afield it may usefully go—that does not begin (logically) and remain throughout vividly sensible of this irreducibility; that, this is to say, does not take its stand in and observe the actual phenomena of speaking from within the first-personal experience that each of us routinely has of speaking, being heard, being spoken to, and hearing; abstracts itself from the very radix of this human singularity.

There yet remains a less important caveat to issue. In saying that [a] speech is the actual sounding of a sentence I would not wish to overlook the fact that not all of our actual speaking is comprised of complete senten-

ces in the grammatical sense. Perhaps very little of it is. A transcription of a viva voce colloquy makes plain how "elliptical," as we are all too likely to say, our actual practice is and how stilted it would be if it were otherwise. It is well to remember this about our actual speech-practice as we analyze it lest we look upon lively speech as if it were failed or not yet achieved writing.

For the very concept 'ellipsis' is privative in its import. It means "incomplete" and so its use presupposes a norm for completeness. The implication is therefore plain: the logic of our lively speech, when perceived as elliptical, is not being taken as what it integrally is in itself, but rather as a mere approximation to our print culture's model of the grammatically complete sentence. We must not meekly acquiesce in the conspiracy of our second-order accounts to obscure and by implication to impeach the autonomous *logos* of our orality.

XVI

"[Speech] exists only when it is passing out of existence." I read this and on its face it strikes me as plausible, even unexceptionable. One recognizes immediately the distinction that is being drawn: the special sense that one has about this altogether familiar thing compared to other things in the world amidst which it regularly appears and that form its stable background. Peculiarly bound up with "time's winged chariot," speech partakes of the transiency and insubstantiality of all the things we only hear compared to the corporeality and perdurability of what we see. Time is the medium of speech that "hurries in a perpetual vanishing" and so therefore does speech itself. Nor is this contrast ever sharper or so freighted with pathos as when my own words, borne by my breath, disappear upon the wind, leaving behind as they vanish their very palpable and enduring rootstock and provenance. Indeed, is any contrast so sharp for me: my fleeting words and my abiding body? The insubstantial audial world and the substantial world we see. The music of Bach's *Suites for Unaccompanied Cello* fills the room with sonorities and then disappears, leaving not a trace; but the cello and the cellist remain behind.

So far so good. There is nothing controversial about this. The spoken word and the written word are different from one another in these as well as in other ways. If, as a heuristic device, one is to exploit the differences between the sensorium of an oral culture and that of a print, for the sake of criticism, then one will have to make this commonsensically obvious claim. In making it for his purposes, has Ong really exposed himself to philosophical attack? Let us see.

Becoming philosophically serious, moving away from the statement, which in the context of ordinary first-order talk, seems quite unexceptionable, toward the context in which I can examine it with a view to

formulating a second-order commentary upon it, asking myself, "What does it mean?", of this hitherto unimpeachable commonplace, I write the words: "The world exists only when (as) it is passing out of existence." For less than an instant I am puzzled and uneasy. Does the analogy here between Ong's sentence and mine weaken the force of his? Of course not, I think with relief. This world that exists only as it is passing out of existence is a world not only in time, hence subject to change; it exists in space as a world of objects that endures to be *seen*. Whatever superficial analogies exist here, the disanalogies ensure that the sense I have of the evanescence of speech remains well founded. Even if the words that are just now flowing from my body (even as my spoken words do) through the medium of this pen (an instrument that, as I hold it, has been incorporated into my body) take their place in the world amidst all the other enduring objects in the world we see, the case for the peculiar status of speech expressed in Ong's words is intact.

I am at ease, comfortable with this formula that distinguishes so happily between the dynamic, temporal, bodiless reality of my speech and the enduring spatiotemporal reality of my body. It is entirely congenial with my residual Cartesianism: nonextended words issuing forth from an extended body—*res cogitans*—*res extensa*. And yet I find myself vaguely apprehensive again over that old modern problem that I thought I had put aside: if *res cogitans* and *res extensa* are finite substances as different from one another as Descartes claimed, how shall the twain ever meet? How, for example, can speech, as the sounding of words, being temporal but bodiless, nevertheless "be born in the spatio-temporal body," as Donald Wesling¹ has said, supposing himself to be paraphrasing and extending Ong's view? If my bodiless (spoken) words are to be thought to "die" (Wesling) on my carnal lips they must somehow be born there. Yet how can this be? How can my bodiless words "live" and "die" in this ontologically alien place where all is *mere* body? How can anything so discontinuous with my spatio-temporal body as are the bodiless words of my speech (Wesling calls speech "this undulation of the air") be "born in the body" and yet at the same time "efface, forget the body"? (Wesling). And further, how can the fleeting, temporal, but bodiless words of my speech have a *temporal* relation to the more enduring but, even so, temporal world of objects, while having *no* relation to the *spatial* dimensions of them—except by means of their transformation from a speaking into a writing? As the vectors of my lively personal speaking, my words do not survive their sounding; as writing, they are transformed into enduring but now quite impersonal objects. And

how indeed is *this* possible? How can lively, evanescent speech be translated into static, perduring print, unless there is some Cartesian "pineal gland," some *logos* common to them both, some ontological bond in virtue of their both issuing from the radix of all meaning and of all meaning-discernment, namely, the tonic and ductile mindbody ingenuously dwelling in its world?

If this exhausts our ways of talking about these issues, then lively personal speaking as the saying by someone of words, fully endorsed, who holds himself and is held by others to be accountable for them, is so evanescent as to afford only the thinnest, instantaneous existence for the self. And if the alternative is the transformation of lively personal speech into the static, impersonal medium of writing, even more of print, there is small wonder that we should suffer an obsession with the lost voice of a text.

At the end of even this modest catalogue of philosophical perplexities, a demand for sanity takes hold of us. From this setting in first-order practice and talk the rejoinder will be: "Oh, come now. Be serious. You're really making it all up. These oversubtle inferences you draw from the perfectly straightforward, useful, and really noncontroversial remarks of Ong, of Wesling, are very clever. But what's the point: all this about a crypto-Cartesianism with two sorts of finite substance, nonextended speaking and extended bodies; claims as well as to how, if at all, these sorts of entities can be related to one another—in time, in time and space. Nothing was said of this. Nobody *really* has these problems. Unless of course you count Descartes; although surely even he had them only when he was driven by boredom during a winter in Germany into playing autoerotic intellectual games. Furthermore, his solution to the mind-body dualism, suggesting that they 'meet' in the pineal gland, is so patently ludicrous that he could only have meant it as a joke."

This voice of sanity offers an answer that we must, in the end, heed. But even here, in the beginning, we may permit ourselves to anticipate it.

Yes, this is true. Yes, there is a sense in which we made it up: made it up as we moved from the context in which a second-order comment upon such talk could be made. However, what is important is that quite generally in this culture when we do this it is into Cartesianism that we fatefully drift. And without a doubt one of the reasons for this is that we are the creatures of a print culture, as Ong has shown us.

Let us then grant this commonsense sanity its rights and make appropriate concessions. Neither Descartes, nor Ong, nor Wesling, nor I in an

important sense, indeed, in *the* important sense, really has any such intellectual perplexities at the level of first-order practice—though it is a heavy burden, in the ethos of the Enlightenment, to show that what is everywhere inescapably implied in our practice is, *even so*, philosophically significant. Who of us feels seriously skeptical, even odd, talking about ourselves and others as if we were all essentially the same persons today as we were yesterday; as having proper names that stand and are taken by ourselves and by others to stand for the principal actor in the stories to be in the midst of which is to have a human life; as having made and kept promises to one another; as bonded to one another not only through the joint presence of our relatively enduring bodies in space and time, but also through and by our spoken—indeed, sometimes *only* by our spoken—words in time? Do any of us act as if the world of nature—however we choose to construe it—that appears in our midst and in whose midst we appear to one another is not “there”; that the dense complexities of intersecting histories are not the actual context of our convivial life? Do any of us go to sleep at night fearing we will awaken to find that the quite intransigent plexus of political realities that lie among us because our acts of speech have called them into being will have vanished; that one can know nothing of what a person thinks (including what oneself thinks) from his words and deeds, tone of voice, and gestures? Do any of us really act as if our speech were without semantic reach, without reference; as if “things,” in the language of Jean Paul Sartre’s Antoine Roquentin, “are delivered from their names”? The answer is, of course, yes! There *are* those among us who believe such things. But they are the insane. And, therefore, yes, the fact that most of us most of the time, however angst-filled our lives may be, do not routinely and continuously suffer such antic philosophic doubts must be seen as having philosophic weight. Only the obsessively whimsical will deny it.

At the same time however that we take comfort in and endorse the residual sanity that informs our practice and our first-order talk in the midst of it, let us not underestimate the subtlety and depth at which this culture is prepossessed toward the Cartesian dualism when we move to make a second-order comment upon this practice and its talk. And while it is an exaggeration to say that Ong has not only written a series of books about the differences between orality and literacy *within* a print culture, but has written them from the *standpoint* of a print culture, it is perhaps nevertheless an illuminating thing to say.

“Speech exists only when it is passing out of existence.” How can we talk

about this so as to avoid the Cartesian pitfalls at the same time that we avoid appearing to say that speech exists only in the process of not existing—and finding ourselves wondering what this could mean? Let me remind you that I have earlier on elected to reduce the meaning of the word ‘speech’ and its cognates to “the actual sounding of words.” This will mean of course that most of the following analysis of “speech exists only when it is passing out of existence” applies *mutatis mutandis* to “music exists only when it is passing out of existence.”

Let us begin by observing the fact that the words that are the elements of a *speaking* do not exist in atemporal instants—though as I write these very words that, as they appear on the legal pad before me, acquire a mode of being in the world that tempts me, *as I think about the words of a speaking*, to imagine that they too, like the *written words*, taking form before me (all of the particulars of which are simultaneously co-present before my eyes in [visual] space) appear to *endure in atemporal instants as do these written-down words* appear to do. The words of a speaking do not exist in these little eternities—which are but dead because timeless slices of (visual) space—between which, in turn, there are only atemporal instants and between which, further, there are no intrinsic relations. It seems desirable to issue this quite obvious claim, since we saw that Ong, subject to a parallax, sometimes beheld the words of a speaking as if they were the words of a writing such that therefore they could be expected to be *present*, to leave a “discernible direct effect in space,” but “paradoxically” (?) did not. But we also need to circumvent the visualist bias of the philosophic tradition whereby the knower is depicted, in second-order descriptions of what is taken to be the normative noetic situation, as arrested before a finite, atemporal, static world of objects simultaneously co-present to sight in (visual) space as, in a sense (by contrast with the oral-aural situation), a reader is arrested before a finite, atemporal, static world of type.

On the contrary, as I have observed earlier, in a series of three notes forming part of a heard melody, in a series of three words forming part of a lively speaking, the second in each series pretends the third and retrotends the first. There is an important sense therefore in which at least *many* of the notes of a heard melody and of the words of an actual speaking *are* simultaneously co-present for us *in time*. And we all know this perfectly well. Thus it is not necessary for me to adduce an account of how the second note or word in the series as I hear it in the present differs in the mode in which it then appears from the mode of appearance of the notes or words that are being, in this same present, pretended and retrotended.

Whether it is the same mode or a different one is of no importance here. All we need do in this second-order account where, as we know, the seductions of Cartesianism are ubiquitous, is simply to acknowledge what we indubitably know: without this co-presence in time of a succession of notes or words there could be neither music nor speech. Their *co-presence* in time is precisely the worldly, palpable *bond* among the notes and words within this pretension-retention; their co-presence in *time* is the *dynamism* within this pretension-retention. And going against the inertia of my own print-culture imagination, I want to affirm that these bonds, lodged within these pretensions and retentions among the sounding notes and words, are not less discernible, intractable, and irresistible *as entities in the world* than is my spatiotemporal body itself — albeit, “discernible, intractable, and irresistible” in a different way from the latter. To which, quite naturally, you are inclined to reply: “Well, O.K.! You’ve tempered your, on its face, extravagant claim almost out of existence by adding the qualifier ‘in a different way.’” And I rejoin: “The qualification ‘in a different way’ has the effect you claim, the effect, namely, of making my statement appear vacuous, only if one holds that ‘discernible, intractable, and irresistible’ can have a direct, nonfigurative application *only to bodies extended in (visual) space*. The denial that this is so, for which further argument is required, is the gravamen of my case.”

Let us observe. So long as I am fully absorbed in listening to music or speech I am, in a sense, enveloped in their sound and meaning. Critical questions do not arise. If I abstract myself from any actual listening, as I am doing just now as I write, but still have before me a *picture* of myself mindbodily in the midst of the sounding music or sounding words, as I just now do, many questions may arise, no doubt. But one that cannot arise is this: what is the condition of the possibility of these vividly encountered pretensions and retentions holding among the sounding notes and words? So long as the notes or words are either *actually* sounding or are being *depicted to myself* as sounding, the pretensive and retentive relations among the notes and words and my hearing of them and of the tensive bonds among these notes or words are so intimate that this question cannot arise. There is just no room — and here I use ‘room’ in as direct and nonfigurative a way as can be, which is to say, *absolutely* directly and nonfiguratively — for it to do so.

However, if I abstract myself from the actual situation of listening, and even from the *picture* of my actual listening, and imagine myself instead seated before a musical score or a page of print at which I *look*, from which

I read, everything is abruptly changed, as Ong has thoroughly documented. Suddenly I can ask such questions as: What are the conditions for the relations of pretension and retension holding among these inert, inscribed notes or printed words; “where” abide the pretensions and retensions between these dead, self-subsistent, windowless monads—can we call them “notes,” are they any longer “words”? How can one of these lifeless entities on the musical score or page of print be “pretending” another and “retotending” a third? Surely, these bonds are not so substantial as are the notes and words on score paper and page of print, but things only of our own making, things not *out there* in the world, but only “there” (“here,” really) in our (subjective, ontologically secondary) perceptions.

So at a stroke we get “the bifurcation of nature”: the subject—the object; thinking thing—extended thing; the locus of secondary qualities—the locus of primary qualities; the garden, perfumed and colorful as it is known to us—the garden as it *really* exists, in itself, extended in length, breadth, and depth. Some variation or other upon this view—even if only tacitly so—is still held by many philosophers. And it is there in the words of Ong and of Wesling—at its worst, most potent because only in its tacit guise. Yet hardly anything could have been more alien to their intentions! It is a hard saying, but true. If we take Ong’s “speech exists only when it is passing out of existence” at face value as true, we are led, if we strictly observe the implications of what is said, to this pass. But of course in practice, thank heaven, we do not!

It might be desirable, were it possible, to abandon this line of inquiry and retreat to a more primitive, concrete set of pictures to guide our reflection. Alas, it is not possible. Our innocence lost, we can only redress—never escape—on a case by case basis the biases implicated with the Cartesian picture of man’s relation to himself and the objects of his knowledge. Since the question has been asked, it will now have to be answered: Where indeed do these pretensions and retensions abide? Are they “out there” really in the world between the inscribed notes and printed words and quite as intractable as they? Or are they there only in our apprehension, i.e., not really there at all? A preliminary, if indeed not a premature, answer is: even though it is misleading because Cartesian to say that they are really “out there,” it is possible to say that these bonds are as real, as irresistible, as intractable as the inscribed “notes” on the musical score and the printed “words” among which they hold; as direct and discernible *as anything can be*. And where do they abide? They abide in my mindbodily coition with the world—to use a happy conceit of Merleau-

Ponty—*just as the “notes” and “words” do; just as the notes and words do.*

In another of his exemplary sentences Ong says: “Speech leaves no discernible direct effect in space.” There is, of course, no issue as to whether or not speech does exist—even if in Ong’s sentence its existence seems rather equivocal. If it indubitably does exist, then it *must* leave a “discernible direct effect,” perhaps many effects—even if some of these are not visible as printed words are visible. To say that speech exists, that is, perceptibly and in some sense (perhaps in several different senses) *abidingly* appears in the world, even while it is in the process of disappearing, requires that the pretensions and retentions that are its conditions have an identifiable locus (perhaps several different sorts of locus) in the world.

No one, I think, doubts any of this for a moment, Ong least of all; and, in a way, it’s rather embarrassing to have to say it. Yet if we take Ong’s exemplary sentence at face value and with it its implicitly Cartesian presuppositions, then we shall have to supply a radically different account of the nature of things to make room at once for Ong’s second-order account and for common sense.

Just such an alternative view is implicated in my assertion above that the pretensions and retentions holding among the notes of a melody or the words of a speaking abide in my mindbodily coition with the world. Let me begin to set forth this alternative.

Modern Western common sense generally takes it for granted that the word ‘space’ at bottom can only *directly* refer to that form within which three-dimensional material objects appear as present to our senses—mainly to touch and sight, but overwhelmingly to sight—and within which they endure in themselves. And even in our commonsense reflections on these matters, indirectly subject even though they are to our Cartesianism, our sense of the uses of the word ‘space’ is dictated by a picture of ourselves as spectators of a distanced spectacle, disembrangled from the moil and ruck of the world like discarnate gods. Held captive to this picture, we quite naturally take it that expressions like ‘this is no place for that kind of behavior’ or ‘there is no room for you in this organization’ are figurative and indirect uses of space expressions enfranchised only by virtue of their presumed analogies with the nonfigurative and direct uses of ‘space’ to refer to that that is the setting of the world of material objects we behold with our eyes.

Before proceeding it is worth remarking what a very curious thing it is for me to trust in these analogies. I do not doubt of course that by reason of the perceived analogies between what, from a critical standpoint, we call

the direct, nonfigurative uses and the indirect and figurative ones that this enfranchisement of the latter by the former is legitimate. For in practice I ingenuously license and you endorse the so-called “figurative” and “indirect” uses in *all* regions of our discourse in a thousand ways. And the question is: How can this be? If there is not some archaic *logos* enforming this ground and radix of all meaning and meaning-discernment that is my tonic mindbodily being in its world, some *arché* in which inhere both the logic governing the uses of “direct” and “nonfigurative” space expressions and that governing the analogous putatively “indirect” and “figurative” ones, how could there *be* any analogy among these uses, therefore this enfranchisement and legitimation upon which in our speech-practice we ingenuously depend?

It also needs to be asked: If the “indirect” and “figurative” uses of space expressions are thus authorized by the resemblance of their logical form-in-use to that of our “direct” and “nonfigurative” uses, *whence the authority* of these latter? Or could it be quite otherwise? Could it be that the use of the space expression ‘this is no place for that kind of behavior’—whatever penultimate endorsement it may appear to derive from its analogies with ‘the dimensions of the cabin are nineteen feet by twenty-two’—*is enfranchised in my act of speech itself*? As I speak—now in this mode, now in that—and you, environed as I by our mutual usage, in hearing take up, instantly interpret, and endorse my words, I take my stand in space expressions affiliated with my immediate sense of having a *place*—visual, audial, tactile, proprioceptive—in the world; indeed, I have an immediate mindbodily sense of myself as *the paradigmatic place*. For that matter, is not my taking a stand in either one or the other of these just my dwelling assertorically in my words? Could the authority of my space expressions—whether thought to be “direct” or “indirect”—descend from anything other than the fact that in speaking in a given speech situation I *mean* them and am taken by *you* to mean them? That is, I *use them in this way*. As I asseverate my words I dwell assertorically in them; and in so doing, *found* in infinity for both of us a place—the place par excellence retrotended by my every spatial reference. To use Kierkegaard’s image, this is the way we tie the knot in the thread of language. If this is true, of course, it means there is *no* form of expression that is privileged except *in relation to some actual speech situation*, set within the landscape of our usage. If in a given act of speaking the authority of my words derives from my dwelling assertorically in them; and if I *do this* only because I have skillfully appraised their appositeness to the situation into which I speak, then the critical-rhetorical

categories 'direct-indirect' serve only to identify the speech situation with which we are dealing. Indicating what would count as "direct," what as "figurative," is a contribution to specifying the language game, though in practice our recognition of this is hardly ever dependent upon our explicitly remarking such clues. In any case, while we are acritically playing any given language game all expressions we use are equally direct and nonfigurative.

In this sense, we always mean just what we say and not something else because, *in this sense*, we cannot do otherwise. I may say to you quite offhandedly: "I have been at my writing all day and have gotten absolutely nowhere" as a way of indicating to you, *but also of discovering for myself*, the way in which I just now find myself in the world. I will not be taken by you to be indulging in colorful speech; and if you were to say, "What do you mean?" I should reply, with a start, "What do you mean 'what do you mean'?" For there is, strictly, *no other way* of expressing and representing the state of affairs in which I find myself and am claiming to find myself. As I spoke I relied upon the subtle powers of my mindbody at that moment to perform the feat of judging the appositeness of my words and to appraise its own performance while doing so. Anyone who, in this context, rejoined by asking, "Yes, but what *really* happened today?" would rightly be dismissed as a blunderer and a boor.

"I have been at my writing all day and have gotten absolutely nowhere." The utter ordinariness of such a remark does not seem to call out for philosophical attention. Yet the utterance of this modest remark is in fact only the consummation of a complex though largely unwitting search for orientation and meaning with gradually extending horizons, whose *arché* is that provenience of all meaning and meaning-discernment, my lively mindbody in its ambience. And these uttered words never cease retrotending the most primitive and inarticulate levels of this mindbody from which they issue. In saying these words, then, I do not appraise a situation in a detached manner in order then to report upon it. Rather, in their very saying, I *bring forth*—for myself, for you—a mode of my own being in the world. Until my words consummate this particular search for meaning in the verbal dimension of meaning-expression, I do not yet enjoy that mode of being in the world expressed and represented—for me, for you—by the words 'I have been at my writing all day and have gotten absolutely nowhere.' For fundamental to this mode of being is the fact that, at that moment, I dwell in my words that I have brought forth and that have, as I have brought *them* forth, brought *me* forth—in that mode.

We therefore mean what we say, in the above sense, because we cannot commit ourselves to our powers of expression and representation at the same time that we withhold that commitment; we cannot acritically asseverate our words with a view to fitting them into the specific convivial setting in the midst of which we mindbodily are and into which we would insert them and *at the same time* speak other words in some other setting. The illusion that matters are otherwise is fostered by the fact that our acts of speech, dynamically unfolding in time as they do, seem to outrun themselves entirely. Each speech situation anticipates the next; each succeeding one seems to diminish the assertorial authority of its antecedent. In our grandiosity we begin to picture ourselves to ourselves as gods who have this whole process before our eyes to behold noncommittally, each element equal to every other because all are matters of indifference in an eternity that is in fact a dead slice of (visual) space. "Now": we have not the power to disembrace ourselves from "now"—whether this means "this instant," "our lifetime," or "this century." "Now" is animate with the tonus of our actual evaluings. Angelism is a temptation to which we are especially exposed as denizens of a print culture.

So it is true that as we acritically play any given language game all expressions we use, *as we use them*, are equally direct and nonfigurative. Any anxiety that this is dangerous linguistic antinomianism, leaving us without firm footing, arises only when we abscond from our actual speech situation. In practice we rely with utter ingenuousness upon the hermeneutical skills of our mindbodies to disclose as familiar because more or less defined the specific speech neighborhood in which we are safely placed *in concreto*, hence without angst, amidst the infinite possibilities before us of the universe of speaking and hearing, which need hold no terrors for us.

It is useful to observe, as we conclude this excursus, that as I have moved through these reflections I have gone from taking at face value the critical categories 'direct-indirect' and 'nonfigurative-figurative,' asking what are the conditions for the possibility of there being analogies between them and of applying them critically to discourse, toward an acritical dwelling in my actual speaking where these critical categories cease to have any use.

Let me now pick up the main thread of my argument. For modern Western common sense the world is *pictured*, as reflection grows more sophisticated, that is, more detached from its roots, as being one in which all of its particulars are simultaneously co-present to our sight in an instant without temporal thickness and are therefore static. Sight that is *pictured* as corresponding to this is of course itself necessarily static as well. In trea-

tises on epistemology and perception in the philosophic tradition, substantial rather than gerundival language is most often used, further contributing to the bias towards stasis.

In spite of this, as we see, most of us can recognize that space is not just one thing or, better, that the word 'space' does not have only one use. As we see, too, our ordinary speech is shot through with quite artless and, I think *on that very account*, licit uses of this word and its cognate space expressions. Furthermore, we are quite capable of recognizing that the space that is the form of the sense of hearing and that that is the form of the sense of touch are phenomenologically heterogeneous, even when these tend in reflection to be assimilated to a picture of visual space abstracted from our actual feats of seeing.

Against this modern Western commonsense view I propose to advance the following alternative. The ground of all my discriminations and articulations of space, both reflected and as yet unreflected—visual, olfactory, tactile, audial, kinaesthetic, proprioceptive—is the radical *whence* of my lived, as yet unreflected mindbody in its worldly circumambience. It is in other words a *place*: the *archaic place* from “within” which all my *acts of placing*—both gestural and spoken—proceed. Spatiality as *place* is a *whereon-to-stand* from which you and I and all those others jointly make our mindbodily appearance with one another in our mutual world. Place is a *provenience*; that in virtue of which I am oriented from within my mindbody—this lively and tonic mindbody with which I have the most intimate relation conceivable because *this* relation is the *conditio sine qua non* of there being any relations whatsoever; this mindbody that for me cannot be reduced to the “same” one that is *for you*. To such a view my orientation to my own mindbody *as an object*, let us say, *standing alongside yours* and *in front of* the desk, as we would think of it in our Western second-order account, is derivative. It is “within” this oriented *whence* that primordial spatiality lies. If there were no such as yet unreflected *whence*, no orientation from within my mindbody as it is and is lived in the world uniquely for me, there could, for me, never be a reflected orientation. All the forms of spatiality within which our conjoint sensory world appears are derived from this archaic provenance of our jointly and convivially appearing mindbodies. Space presupposes place: reflected spaces presuppose antepredicative, unreflectable places.

Pascal, that great contemporary and antagonist of Descartes, fully grasped the awesome import of the then emerging conception of the universe. He saw the incommensurability with the human person of a universe exhaus-

tively conceived as homogeneous quanta of measurable extension “the center of which is everywhere, the circumference nowhere” so that he explicitly drew the contrast between *infinite space* and *place*. He says: “Swallowed up in the eternity before and after, the little *space* which I fill, and *even can see*, engulfed in the infinite immensity of spaces of which I am ignorant and which know me not, I am frightened, and am astonished at being here rather than there, for why here rather than there, why now rather than then. . . . Man has fallen from his true *place* without being able to find it again.” Following him here it is useful, then, to distinguish between *place* as the *where* and *whence* of my as yet unreflected mindbody and *space*, in all of its different senses, as the reflected, derivative, and parasitical where and whence—olfactory, tactile, audial, proprioceptive—within which we jointly make our worldly appearance.

Even as I set forth this alternative view the shadow of Cartesianism looms. Therefore let me issue a caveat, now that I have opposed the modern commonsense view of space by invoking the distinction between the *as yet unreflected* and the *reflected*: contrary to what we are sorely tempted to think, their relations are very complex—and they are dialectical. Most important, the realities to which the two terms refer are connected at an ontological depth that systematically eludes reflective grasp, since that depth is itself the ground from which reflection arises, namely, the mindbody that is the radix of all meaning and meaning-discernment. Did we not recognize and remember this, and were we to slip by default into the static language of substantives rather than relying upon gerundival forms, we could easily find ourselves saying things like: there are two finite substances, the as yet unreflected and the reflected—only a stone’s throw from the Cartesian dichotomy proposed by Jean-Paul Sartre: *being-in-itself*—*being-for-itself*. In the above articulations of the relations between places and spaces many traps lie in wait for us. Let us indicate some of these.

To begin, the Cartesian Enlightenment with its myth of the radical discontinuity between *the reflected* and *the “irrational”* as yet unreflected and its espousal of the ideal of total explicitness—all neatly embodied in Descartes’s account in the *Discourse* of his intellectual escape—proffers a grave temptation. For it subtly invites us to imagine that we acquire language in the instant—phylogenetically, ontogenetically; that, to invert Wittgenstein’s remark, language “emerges from some kind of ratiocination.” Unfortunately it is largely irrelevant to this philosophic discussion and even to the less formal commonsense commentary upon our powers of using language, supported by the myth, that almost certainly no one has

ever, in all seriousness, declared that language has emerged from some kind of ratiocination. It tends in spite of this however to be imbedded in the conceptual matrices of both the philosophic tradition and of our commonsense commentary. We have therefore to meet this view head-on.

As we have seen from the Edinburgh studies above, speech is more continuous with prespeech and reflection more continuous with the as yet unreflected than we are likely to notice so long as we are subject to this Cartesian myth. As we saw with Ong's parallax, when, in this ethos, we undertake to analyze language for the sake of a second-order account, we are quite likely to *picture* the linguistic elements of a speaking as comprised of grammatically complete sentences all of the particulars of which, all equally lucent, are simultaneously co-present, and ourselves standing to it in a wholly lucid act of attention: we *picture* speech, in short, as a *printed text* and ourselves as undistracted *readers*. The logic of this picture dictates that when we begin to think about the transition from our prelinguistic to our linguistic selves that we shall similarly think in terms of a fully developed language and a mature command of it, with no intervening stages. And when we do of course we begin to think that language emerged from some kind of ratiocination; that we acquire language as if it fell complete from heaven; and that reflection, itself defined in this picture as instantaneous, uniform, and homogeneously lucent in all its manifestations, makes an abrupt appearance with speech so conceived.

A moment's thought will reveal however that the requirements of this picture are hardly ever, perhaps never, satisfied in our actual experience of speaking and listening. And yet for all of that we speak and understand. It is not that as we speak, are spoken to, and hear we do not with quite extraordinary facility and consistency understand. It is rather that we understand even though the situation is hardly at all as it is pictured. The tacit logical powers upon which we rely in this "disorderly" situation, vested in our lively, tonic mindbodies, thoroughly entrammelled by the messy contingencies of their circumambience, need not, could not be (exhaustively) formalized.

All this suggests of course that some alternative way of talking about these matters is called for. If we abandoned or at least significantly mitigated the regnant depiction of speaking and hearing as if they were a line of print being read, then perhaps we could appreciate how truly rich and complex are the relations among the particulars of the actual oral-aural situation. We would come to see that what a word is and does, therefore what a given speaking comprised of words is and does, and how one stands

to these and to it is not at all just one sort of thing. We should even, perhaps, begin to conceive the relations between our prelinguistic and our linguistic selves—even between our presently, fully developed linguistic and our contemporaneously *extralinguistic* selves in an importantly different way; to abandon the thought, forced upon us by our Cartesianly inspired picture, that we acquire a fully developed language as though it fell complete from heaven and with it, abruptly, reflection. Surrendering all this and the image of language as emerging from some kind of ratiocination, we can begin to appreciate that, if reflection is thought to be perfected in our lucid use of our most abstract languages, formal logic and mathematics; and if language did not fall complete from heaven; then we should expect reflection to be portended in the less than fully lingual stages of the process by which we come to acquire a language. It may be for example that the differences, let us say, between our hearing an “utterance” in a language we do not know at all, but *recognize as a language*, and our lucid, explicit grasp of the meaning of an utterance in our native tongue, may exhibit two different degrees or modes of reflexivity, thereby securing for us some mitigation from the doctrine of the absolute discontinuity between the full mastery of a language (and hence also full reflexivity) and its prelingual roots in our sentience, motility, and intentionality. To be able to find as a means of redress in our present ordinary experience some analogue to the experience, *grasped from within*, of our prelingual relation to language, now lost to us in our sophistication, would be no small accomplishment.²

In a strange land among a people using a language unknown to me, even though I am at home with a very great deal of what goes on around me, it is difficult for me to “find my feet.” First of all there is a kind of opacity in my way of being in the world in this place. I feel a mild claustrophobia and a kind of anxiety born of giddiness, a giddiness produced by feeling as if I had an uncertain orientation to the earth’s gravity, nicely expressed in the image of not being able to “find my feet.” I think it most unlikely that a prelingual child beginning to acquire speech will experience this opacity and this giddiness in the lively ambience of native speakers of the language it is on the point of learning. After all, I experience them only because of the striking difference between my relation to my native language, in which I enjoy both clarity and stability—in short, some command—and that that I have to a language that I recognize instantly as a language but that I am as yet powerless to use. To recognize a language for what it is without being able to use it is, then, one kind of relation to language. To be fully competent in a language is another kind of relation. I cannot of

course revisit those days and hours during which I was preparing myself as a prelingual child to enter the world of speech by uttering my first words. However, as I grasp myself *from within*, now standing simultaneously in one relation to a foreign language, which I understand for what it is but cannot yet use, and in quite another to my native language, which I use very well, I recapitulate the experience of two different degrees of “command” and two modes of participation in a language. Most important for my anti-Cartesian argument, I have a clear intimation of what it is to be at an intermediate stage between the preverbal and full mastery of language. And even though my experience of being in the midst of the process of acquiring this new language is not at all the same, we may conjecture, as my experience of being a prelingual child in the midst of the process of acquiring my *first* language, surely there are important analogies between them, especially when we view both cases against the background of my present full command of my native tongue. From my relation to a language that I have not yet learned I can legitimately extrapolate some of the characteristics of my experience *from within* from my mindbodily prehistory, if you please, of my relation to my first language as I was in the process of acquiring it. Attending to the analogies and the disanalogies among all three cases, then—my own actual prelingual relation to what is to become my native tongue, my relation to a new, second language I am learning to use, and my mastery of my first language—will serve to disclose the incommensurability between the facts, on the one hand, and the Cartesian myth of the “heaven-sent” origins of language and reflection, on the other.

There is a second pitfall in what I’ve written. In the distinction between my mindbody *for me* and my mindbody *for you*, inflexibly and unimaginatively invoked, there is the making of a quite untenable dualism. From the claim for the uniqueness of my mindbody in its circumambience *for me*, it does not follow that for you it could only be a *res extensa* exhaustively definable as measurable dimensions in three directions. What rubbish! Nor does it follow that it is just another object in the world for you alongside the table and chairs. Indeed it does not even follow that my mindbody for you is unequivocally a reflected entity “in the world.” Just as certainly as my own mindbody, in the ecstasy of the act of love, is not *for me* a reflected entity “in the world,” so certainly is the “other” for me in these moments no such thing—equivocal or otherwise.

If your relation to my mindbody can be so various—and I have done no more than hint at the possibilities—is my relation to it less so? When I

walk unreflectively but infallibly through a space, threading my way among the “objects” before and around me, my immediate sense of my own mindbody as I walk, therefore my relation to it as I do so, differs according to whether an object I behold as I pass is mortally dangerous to me, is a comfortable piece of furniture, a delicate glass menagerie, another man whom I know, a woman whom I do not. Between that relation to another mindbody I have when I perform physiological experiments upon it, which I shall designate *highly reflected*, and my relation to one in the act of love (I do not overlook the fact that there are those who “make love,” indeed perhaps can *only* make love, by regarding it as a physiological experiment), which I will characterize as at most only marginally reflected, perhaps quite *unreflected*, there is a practically inexhaustible number of intervening cases.

As we continuously and dialectically move back and forth over this range of possibilities from the as yet unreflected to the highly reflected, so we also move through a repertoire of words and concepts, each rooted in and existentially derived from and therefore peculiarly apposite to the discourse concerning the several different modes of mindbodily being over this range. Think for example of some of the answers to the question “Where are you?”

I am *in* Chapel Hill.

I am *on* page sixty-three.

I am currently *in* a relationship.

I am *in* my seventh decade.

I am *in the midst of* a prolonged depression.

I am *on* sabbatical leave.

I am *on* my fifth beer.

I am *on* a roll.

I am *in* a state of abulia, etc.

We are inclined to think that the body upon which I perform physical experiments is in *visual space* with other objects, as, in a sense, is *my* body; the mindbodily *other* with whom I share the act of love is very close indeed to the *paradigmatic place*, for herself and for me; close to the *archaic place* for each of us whence we mutually appear. The integration in acts of speaking and hearing and appraising speech among the words and concepts in this repertoire, over this range, is vitally and dialectically sustained in the matrix of all meaning and all meaning-discernment that is my—our—mindbodily being. As we have seen, this mindbodily logic is the

antecedent and ground of all logic, be it ever so formal and abstract.

Most of us most of the time move easily and continuously between the as yet unreflected and reflection, between our own mindbodies as the lived prior unreflected provenience of a world and our mindbodies as “objects,” in many different senses, among “objects,” in many different senses, in the “world,” in many different senses.

It is well for me to remind you here of the argument to this point and, in particular, of the reasons for the immediately foregoing excursus. Ong has said: “Speech exists only as it is passing out of existence” and “Speech leaves no discernible direct effect in space.” We have found that whatever virtues these two remarks may have for the limited purpose of distinguishing between an oral and a print culture, they can be made to be true only with some rather elaborate qualification. And we have discovered, too, that even these qualifications are possible only on the basis of an account of the nature of things radically different from the crypto-Cartesianism implicit in Ong’s sentences.

My argument so far has taken speech to be identical with the (mere) sounding of words and proceeded to show that, in fact, in a sequence of three sounding words (and of course three sounding notes) the second pretends the third and retrotends the first, else there could be no series of sounding words or notes—no speech, even in our “reduced” sense; that though they do not leave a direct discernible effect in space as a series of *printed* words do, they *do* leave a discernible direct effect in time and “space,” as notes and words in a series do; that these *sounding bonds* of pretension and retrotension in time and space *abide* in the coition of my mindbodily being with the world; and finally, that they are as palpable and, in their way, as intractable as is my spatiotemporal mindbody itself.

As persuasive as I find this argument to be, as irresistibly as it shows that speech (even as mere sounding words) appears abidingly in the world, which none of us would deny is *spatiotemporal* through and through, I find it to be relatively uninteresting. There will be opportunity to offer a more significant claim later. The point however at this juncture is that it has forced me to give a preliminary sketch of an alternative account of the nature of things that would provide the wider context for making sense of my claims against Ong concerning his two exemplary statements. Only by defeating the Cartesian dualism by rooting both mind and body in a more primitive ontological ground, that is, in the mindbody that is the *whence* of all meaning and all meaning-discernment, can my above claims be made plausible. I undertook this excursus to serve this end. This has enabled me

to say that speech *exists*, appears perceptibly and *in some sense* (indeed, in several different senses) *abidingly* in the world, even while it is in the process of disappearing; that the pretensions and retrotensions that are the conditions of its appearance have an identifiable locus (indeed, several different sorts of locus) in the world; and that therefore Ong's exemplary sentences are true only if qualified out of existence.

XVII

I have observed, above, that in speaking about the world, you and I—you listening and speaking in turn, I speaking and listening in turn—are each embrangled in our own mindbodily presence and each of us in that of the other. In the midst of our common native language, with its complex warp and woof of intentional threads, and in the lively *pas de deux* of the gestural and spoken expressions of our mindbodies we meet each other and the world. This language has the sinews of our mindbodies, which had them first. Its grammar, syntax, metaphorical and semantical intentionality are preformed in the “grammar,” “syntax,” “meaning,” and “metaphorical” and “semantical” intentionality of our prelingual being in the world that are the grounds of their possibility.

All of the expressions of our mindbodies—the visible but silent gestures, the invisible but sounding words—always have this dense, dynamically spatiotemporal self-other-world texture. Any analysis of them must remain continually in touch with this fact. This means of course that the act of bringing my personally owned words into the space in which they can appear between us—I bodying them forth, you, by listening and taking them up, opening a space of speech’s appearance into which they may stand forth as spoken and owned, heard and endorsed—is a comprehensive feat of our integral mindbodies. The provenance of the words you hear is not my lungs, throat, tongue, and lips, even if these are the necessary vectors of their sound, therefore the condition for the possibility of their sense, hence of the appearance of spirit. It is instead my mindbody in the present, dense oral-aural situation. By the same token your hearing of my spoken and owned words does not occur in your ears, but through your mindbody, making its integral response. Moreover, my *silent* gestures in the ambience of my *sounding* words lose all sense if, in analysis, they are

conceptually estranged from one another. The shrug of the shoulders, the eloquent glance, the narrowing of the eyes, the wink, the canted and nodding head—all these have as their context my integral mindbody in the midst of the oral-aural situation. Narrowed eyes derive their gestural meaning only from this setting and strictly have none apart from it—unless the setting is tacitly supplied, as of course it usually is. As I have said earlier, it is only through the choreography of words and gestures I move into and dwell in as I speak that what I mean comes to stand in the world somewhat on its own. These expressions of mine, silent gestures and sounding words, to which I give myself over, make their appearance at that fluent moment when they cease to be the merely latent energies and meanings of my mindbody to become the patent, worldly dance I dance. My lexicon, at once constrained and made potent in the plexuses of its own etymologies, tonic with metaphorical tension, dwells in my mindbody as the performance dwells in that of the musician before he has performed it. For me to speak is actively to flow along the lines of intention that *are* this carnal lexicon.

But what of this *space of speech's appearance* in which I claim that my owned and endorsed words stand forth between us? Is this usage more than a mere figure?

If one holds that our mindbodies are at once the lively *ground* and *provenience* of space and time and are themselves *in* space and time; and if one does not suppose that saying *this* is *itself* speaking in figures, then the answer is: no. As we have seen, this use of 'space' is not figurative. The language is as direct as can be. *This* space is the same as that which feels so contracted that, as we sometimes say, "I couldn't get a word in edgewise." *Another* figure, you say? Then ask yourself: Is this "contraction" palpable? Do I experience it as not having enough room for myself, for, that is, my would-be speaking mindbody in that speech situation? Is there a more accurate or direct way to report upon this refractory state of affairs in the world than for me to say: "I was completely left *out*"? Is this phenomenon of *contracted space* less real than are you and the others in this conversation in which you have been unable to "get a word in edgewise"? "But," you say, "that's psychological" (meaning "that's only how it feels, only in your head," not real; *res cogitans*, not *res extensa*). To which I reply: "Saying 'that's psychological' is making an ontological statement, a statement, namely, about what and in what way things are real. You and I are engaged in an ontological dispute: my ontology against yours. Yours does not square with what is ubiquitously implied in what we both ingenuously and

acritically do, including what both of us say in the midst of our doing.”

If we can sometimes say: “There was no room for what I had to say,” then we must believe that sometimes there is such room, and that our words can occupy this space as “directly” and “discernibly” as can be. How vastly but intricately different the world would be for us, if we did not emphatically affirm these usages and endorse these modes of experience in *doing* what, as a matter of course, we *do*.

Is it true then that “speech leaves no direct discernible effect in space”? No, it is not. And discovering *this* exception reveals a more interesting case than that of merely showing that without the embodied and quite worldly bonds of pretension and retension among our sounding words there cannot be speech even in our reduced sense.

As I body forth my words they flow through my mindbody into the space where speech, *not the mere sounding of words*, occurs; where my owned, that is to say, my fully spoken, words and gestures make their worldly appearance. At the same time of course the pretensive and retentive bonds among my words are engraved upon my mindbody in its dynamically spatiotemporal coition with the world. Indeed, viewed from one perspective, the perspective, namely, of my words as a temporally, sonically, and syntactically integral motif of meanings and intentions, these bonds are seen to be those that serve to integrate my words into a speaking. These selfsame bonds, viewed from another, are seen to be the very ligatures that form the motif of my speaking, gesturing, motile, and oriented mindbody. My *words* as I naturally body them forth (consistency would demand that I say, “as I mindbody them forth”) are as integral to and as connatural with my mindbody as are my artless gestures. For this to be so of course means that my speech and gestures do not have different sources, one “intellectual” and the other “physical,” but are in fact connate. As I body forth meanings through the visible but silent gestures of my mindbody, either gross or fine-grained, so also do I body them forth in the audible but unseen gestures of my mindbody—in, that is to say, speech.

Now, in our quotidian practice and even in much of our talk in the midst of that practice what we *do*, what is *implied* in what we do, what we take for granted, what we rely upon in our transactions with one another massively attest to the truth of this account. It is our tacit cultural Cartesianism that suppresses this fact and places a very heavy burden of proof upon anyone who would advocate it in a serious philosophical colloquy on these matters. So let me press on.

Nothing so forcefully brings home our native sense of the connatural

genesis of speech and gesture from the mindbody as the utter congeniality to our actual experience of the description of our acts of speech as a *bodying forth*. And we would do well to take this fact seriously.

When I find myself using expressions like ‘I body forth meanings in the *visible* gestures of my mindbody’ and ‘I body forth meanings in the *audible* gestures of my mindbody,’ I am struck by how naturally I remark the analogies between my *mute* gestures and my *audible* speech. It’s as if by writing out these very words I bring to expression an archaic communication within my as yet unreflected mindbody between a nascent speaking and a nascent gesturing, which communication is itself the ground without which it would be impossible to remark the analogies.

Our Cartesian intellectualist commitment will of course incline us to represent the phenomenon of “noticing the analogy” in a very different way. It will suggest to us that we have “clearly in mind” something that we know we wish to say and also know in advance how to say. Given this, we might then suppose that calling speech “an audible gesture” would lend a certain density and color to what we already know how to say quite directly. *Such a view, of course, has the matter almost exactly backwards.*

For, observe. In composing as I write—let us suppose, in composing what I have just been writing and what I already strongly sense I am about to write—I do not have what I “understand” and “what I want to say” independently “before my mind” in such fashion that I can then match my words to the thoughts I wish to express as accurately and as engagingly as possible. Writing, as is also the case with speaking—however they may differ—is an act of exploration and conquest, launched into the public world from within my mindbody in its convivial ambience *in order that I may discover* what I sense, perceive, remember, understand, and believe. My being is suffused by my language: it at once *dwells in* and is *inhabited by* the metaphorical intentionalities of its etymological roots, its polyvalent surpluses of meaning, its overdetermination, its more and less familiar choreographies of my lifelong practice of speaking and writing, hearing and reading.

This interpretation of my “noticing the analogy” as I write is heavy with epistemological and ontological import (even of course as the interpretation I am rejecting is heavy with an alternative one): the import, namely, that there is a latent *logos* common to my gesturing and speaking that is archaically rooted in my mindbody. This *logos* becomes patent in my acts of writing, speaking, and gesturing: the acts whereby, in other words, I obey the implications of my as yet unreflected mindbody, struggling towards

the explicitation of the radical *ana-logos* between gesturing and speaking.

From this it of course follows that when I speak of “bodying forth my words” (which is to say no less, “bodying forth what I mean”), despite the deeply ingrained temptation to imagine otherwise, I am to take myself to be using language that is as direct, literal, and exact as any at my disposal *for saying exactly this*. No translation of this language will get us closer to the “real thing.” For it is obvious that this describes an aspect of our speaking *exactly as we know it to be*.

And it is certainly worth noting that in our actual practice of speaking we rarely, if ever, have any self-consciousness over the differences between what from a critical perspective would be called the figurative and the direct modes of speech. In our acritical *practice* we are always speaking “literally,” though of course utterly without consciousness of doing so. And we must not timidly acquiesce to the demands in us of the Critical tradition that we take this fact about the logic of our ingenuous linguistic practice as having no serious philosophic import.

All of this being so, it is useful to explore a bit more the analogies and the forms of interdependency among the various modes of expression of which the lively mindbody is capable, especially those among our mute but visible gestures and our invisible but audible spoken words. For in our meditation upon these analogies, as we mindbodily consent to follow their lead and, so doing, fully indwell them, we will be drawn deeper and deeper into the very root in ourselves where our nascent gestures communicate with our nascent speech through their common *logos*. Which is to say, we will begin to experience our own mindbodily being as the ground and provenance of all meaning and meaning-discernment. I have said earlier in these meditations:

The most archaic sense we have of ‘form,’ ‘whole,’ and ‘meaning’ is grounded in the given, unreflected . . . prelingual integrity and natural gestalt of our tonic, sentiently oriented, and motile mindbodies. . . . We primitively and immediately “know” form, wholeness, and meaning for they are the radical existential modalities of our own being in the world *long before we have words or concepts to embody this “knowledge.”* . . . ‘Form,’ ‘whole,’ and meaning,’ as they appear in reflection, presuppose themselves prereflectively.

If this is indeed the case, it would follow that my mindbody has a power of expressing itself in a repertoire of means ranging from the cries and groans of erotic ecstasy or pain at one end of the spectrum to the mathematical

embodiment of a general theory of the physical universe at the other; and that I express these meanings in these vectors by *mindbodying* them forth. These expressions have presented us with many different sorts of hermeneutical challenge, although we have largely only met them in piecemeal fashion because we have failed, by reason of our Cartesianism, fully to appreciate the analogies that hold among these modes of expression and to grasp the import of their doing so. The hermeneutical problems posed for us by the versatility of our expressive powers are met at the level of our intimate life by a kind of animal wit, which knows quite well how to “read” the cries and groans of erotic ecstasy or pain but issues in due course in, say, medical diagnostics—“ptomaine poisoning,” “chronic alcoholism,” “migraine headache”—and proceeds to the psycho-sociological study of “body language” to linguistics to semiotics to psycholinguistics to speech-act theory to literary criticism to epistemology to ontology, etc., etc.—all these latter no less depending at bottom upon our animal wit.

And I do not hesitate to draw the conclusion—though I shall not develop it here—that if we do allow ourselves to be struck by the analogies among these very disparate vectors of meaning, we may well feel inclined seriously to examine our age-old ways of grading the truth and reality-bearing authority of these modes. Let us, for example, boldly challenge the sometimes facile distinction between *mythos* and *logos* in its many guises. It will follow as well of course that the practitioners of the theoretical disciplines studying these phenomena would have a basis alternative to that of our regnant Cartesianism for defining the scope, nature, and subject matter of their inquiries and of their relations with one another. But that is quite another story.

What then of the analogies and the forms of interdependency among our various modes of expression?

Let us take first the case of sign language. Here I do not mean those languages in which the deaf and those who “talk” with the deaf can sign concepts and spell out whole words with their fingers. Viewed from one angle, what the deaf do in their sign language is to body forth their meanings in a way hardly distinguishable, if you ignore its formal character, from my *gestures*; yet they are speaking. And a skillful speaker of this gestural language who accompanies his visible speech with conventional spoken English for those in the audience who hear (are the deaf an audience—or are they rather a *vidience*?) is not performing a word by word translation of the one into the other. What he is doing is rather more like speaking simultaneously in two different languages, though it is not exactly that either.

For consider how, in even a quite routine act of thoughtful speaking in our native verbal language, *thinking*, *saying*, and *meaning* are mutually implicated—that is, interwoven and plaited together like threads, distinct yet inextricable. Now, try to imagine thinking, saying, and meaning a given thing and *at the same time* thinking, saying, and meaning “the same thing” in the sign language of the deaf. As certainly as a logic enforms the give and take among your thinking, saying, and meaning as you speak aloud your words, so also does a logic enform the give and take among them as you silently body forth your gestural signs. You do not translate from the words to the signs and then back again, yet there is a tacit communication between the two, *even at the surface level*.

But even more, what you are thinking, saying, meaning in the verbal language is “the same as” what you are thinking, saying, meaning in the sign language. Since it is the same person saying “the same thing” in two different ways *at once*, a common *logos* must underlie these two different feats at some depth below the surface: indeed, in the very depth provided by the ground of all meaning and meaning-discernment. We will find this feat remarkable only if we view it in Cartesian terms, imagining perhaps the threat of imminent grid-lock in the pineal gland!

Before leaving the special language of the deaf it is worth asking a highly speculative question about it. If, as I contend, our verbal and gestural languages have the same provenance as vectors of meaning, however they may be specialized, even in different directions; and if therefore they are governed by a cognate, if not a common, *logos*, so that even at a surface level their interaction is integral; there can be no serious question as to their interdependence, both on the surface and at the depth. However, it is still possible to ask concerning the invention of this formalized sign language what elements of it depend more upon the logic of our unformalized natural gestures and what elements are more parasitical upon, derivative of our formalized verbal language? To be sure this is a difficult if not an impossible question to answer. It is cognate with a perhaps even more difficult one: what have been the relations between, on one hand, our meaning-discerning and meaning-expressing, though as yet mute, mindbodily sentience and motility (in our infantile tropisms and gestures toward light, movement, the sound of the human voice) in the ambience of speakers of the verbal language we are on the point of acquiring, and, on the other, our first choreographic incorporation of words? Fortunately there is no need to answer either of these here.

The asking of the first of these does have however a rhetorical function.

Let me then put it in an even more outlandish way. How would a formalized sign language among a people who could not even imagine an audible speaker differ from the one actually in use for speech among and with the deaf? The posing and contemplation of this question may serve to make us uneasy with the tempting assumption, born of our Cartesianism, that we already understand the relations between our verbal language and our gestures.

But now to sign language in a different sense. What I mean here is so utterly ordinary a phenomenon that it will require a special act of attention for us to be struck by its import: the practice of “speaking” to those who do not use our verbal language. Without the benefit of the formalizations of the language of the deaf, we are able quite ingenuously to make ourselves understood by means of merely visible gestures—either large-scale ones that act out a whole tract of a story, or small-scale ones, such as pointing to oneself and to another. I do not of course overlook the fact that as I employ this gestural language of the particulars of which I am more or less fully aware I am at the same time giving off many clues of which I am only tacitly so; and also that anyone interpreting what I “say” is relying upon clues of which he is not explicitly aware. We need to be struck by the fact that our speaking and gesturing are so essentially connatural that we move with ingenuous ease from the one to the other or operate at once in both, like the man simultaneously audibly speaking words and silently signing them. What we are actually doing of course is nothing less than making an asseveration about a state of affairs in the world in a visible but mute, nonverbal medium. In ordinary talk and action we betray no sign that we regard this sort of thing as remarkable or even noticeable. We quite offhandedly refer to “statements” that are made by a painting or a piece of music, or perhaps by its painter or composer. When however we propose to make our commentary upon the relation between man and language with critical seriousness we are all too apt to confine our analyses to spoken—or, even more likely—written words; as if it were not an important fact about speech that it is *spoken* and *heard*; as if the page of print had not been *written* to be *read*; as if our lively, sentient, motile, oriented mindbodies in their convivial circumambience are no part of what calls for comment.

I find myself on the point of writing the words, ‘A sign language in the above sense is really a rude (but usually entirely adequate) translation into a visible gestural medium of what could be said with greater precision, nuance, abstractness, hence logical transferability, in the *audible* gestures of a spoken language.’ But I catch myself. This is to view their relations

heavily biased in favor of audible speech precisely in the way I am protesting against. Instead of remembering that speech and gesture are connatural in my mindbody, at root an expression of a common *logos*, as I have argued, I am here carelessly taking my stand with articulate verbal language as the radical given. If I do this, I will then go on to suppose that gesture is paralinguistic: that is, merely alongside of, subordinate, auxiliary to verbal language, instead of immanent in all our mindbodily feats of expression. And then I will start to talk about the translation from an inferior gestural “language” into a more nuanced and therefore superior spoken language. It is not at all that I would never find myself saying what I mean with gestures, say, even though on that occasion I could also “choose to say it in words.” It’s that the image here of my standing vis-à-vis my nascent words and gestures is profoundly misleading. For it suggests that I have a relation of detachment to my gestural language, on one hand, and to my words, on the other, and that, standing between them, I exercise a kind of lucid choice. Whereas, in fact, when “I find myself saying what I mean” spontaneously and artlessly, whether with words, with gestures, or more likely with both, *thinking*, *saying*, and *meaning* are mutually implicated in such fashion that the relations of visible, mute gestures and invisible, audible ones in the actual speech situation could not be described as the translation of one into the other, as one being a commentary upon or elaboration of the other, or as one being a *mere*, because contingent, accompaniment of the other.

When Piero Sraffa, having read the *Tractatus*, placed the back of his hand under his chin and gave a sharp, outward stroke in a familiar Italian gesture and asked his friend Wittgenstein, “And what is the logical form of that?”, his *integral speech-act*—bodied-forth words *and* bodied-forth gesture—was of such precision, economy, nuance, and power as, at a stroke, to put the whole of his friend’s early work in question.

Another case we need to recognize somewhat in passing is what I shall call *co-linguistic gestures*. There are many situations in which we use such words as ‘this,’ ‘that,’ ‘here,’ ‘there.’ In some of these cases, the *word* is strictly meaningless without an accompanying gesture. The demonstrative pronoun ‘this’ is almost invariably accompanied in use by a gesture of indication, either quite specific or postural. If I say, “Please put the trunk right *here*” (“not over *there*”) I will probably accompany my words with a pointing. I call these *co-linguistic gestures* because *as used*, they are on conceptual all-fours with the *words* with which they appear. Their bonds with *words* are of such an intimacy as

to make them “quasi-words,” to place them as *gestures* in a class *sui generis*.

Coming to ground here, we discover in my description of these co-linguistic gestures that, viewed from within itself, all of the elements of this integral act of speech—what in my second-order accounts I would distinguish as the reflected verbal and the unreflected gestural—have equal expressive authority and therefore equal assertoric weight. At any given moment my expressive mindbody *in itself*, that is, antecedent to and independent of any description of it, is exactly where and how it is—though of course tensively so—and not somewhere and somehow else: satisfying its own mute, self-authorized axioms of significance and standards of appositeness, obeying its own deep logic in gesturingspeaking-speakinggesturing, requiring no endorsement from any reflected account.

On this page, of course, we can only represent the complete, integral speech-act graphically, not oral-gesturally. Hence: “Put the trunk here [a pointing].” At this near still-point in my reflected representation (as it happens, printed on this page rather than *viva voce*) of the tension between the *word* ‘here’ and the *quasi-word* ‘[a pointing],’ the common *logos* enforming words and gestures becomes vividly evident in their equivalent assertorial weight. The *kind* of use to which the *gesture* is represented as being put in this speech situation is hardly distinguishable from the *kind* of use to which the *word* is represented as being put. We can therefore equally call both of them gestures or both words. For my expressive mindbody is depicted here as dwelling in a moment of indifference between the reflected verbal and the unreflected gestural as vectors of meaning. For the meaning that is hereby borne depends equally, in the same way and with the same assertorial weight, upon the spoken word and the soundless gesture.

Here, beyond peradventure, the common rock bottom of our sounding words and our silent gestures has become *irresistibly obvious*—thereby perhaps at long last making *plausible* my claim that this is so!

Once we have begun to take our mindbodies seriously as the plexus where all meanings converge, which all our powers of meaning-discernment retentend, but especially as the rootstock and lexicon of our powers of expression, then, as we have seen, the concept of language itself is broadened in a heuristically provocative way. Suddenly all language becomes body language, from the cries of erotic ecstasy to the formulas of higher mathematics. And seeing that the logic that governs our lively oral speaking and hearing of speech and our feats of writing and of reading resides in and derives from this mindbody is to put the discussion of these matters, once and for all, beyond the Cartesian dichotomy of thinking thing—extended thing.

Body language—more exactly of course mindbody language—something upon which we have all been relying since the first hours of life, if not indeed before then (relying upon it, in fact, as a matter of life and death) is a recent “discovery” of social scientists. They have remarked the fact that we are broadcasting messages during our every waking hour by means that range from our overall posture—submissive, threatening, alert and mobilized for flight or fight, abstracted, reposeful, acquiescent, etc.—to the intricate sexual come-on. And they have also shown that the ambivalence that most of us feel towards our environment, both human and nonhuman, is richly documented in the ambiguity of the message that we send.

The principal interest for us of body language in this restricted sense lies in the fact that, in contrast with the formal sign language of the deaf, with the informal sign language we use with strangers to our native tongue, and with co-linguistic gestures, its own grammar as a gestural language requires no verbal complement, though it is often accompanied by words; but most important, the gestural language often conveys a message that gives the lie to the spoken words, like my nodding my head as I say, “No.” Saying “No” is something I openly intend. The intentionality of nodding my head is not so open—I might even deny I had done it—but intentional it is nonetheless. Indeed it is only on condition that body language is something we are given and acknowledge ourselves to be given to using non-involuntarily, even if unconsciously, that it can have the significance imputed to it. What is of special interest to us here is that any theory about speech and speaking that does not explicitly deal with this capacity of our mindbodies to “say” counteractive things in two different languages at once, gestural and verbal; that does not interpret the mindbody’s power, quite independent of words, to make statements—as so-called psychosomatic illnesses may be thought to do—is in danger of sliding back into Cartesianism.

We all have acquired great hermeneutical skill in interpreting these messages in our human environment, even as infants. We have therefore long since been trusting in them and in our own capacity to read them. Only Critical bad faith could permit us to doubt therefore that there is a communication between our gestural and verbal languages through the medium of our mindbodies by reason of their mutual participation in their *logos*.

A final preliminary consideration before turning to the *language of gesture*. We need to ask rhetorically about the status of the cries and groans of erotic ecstasy and of pain, which are, after all, among the expressions of what is meaningful to us. While these hardly qualify as lucid “statements,” even less as speech-acts, either mute but visible

or invisible but audible, they are of interest here on several counts.

First, whether in their association with ecstasy or with pain, these animal-like cries (they are *at least* animal cries!) differ from the strictly involuntary noises that our bodies occasionally make in that we “give ourselves over to them” as we usually do not either to the former or to our body language in the restricted sense. I do not suggest that it is easy to distinguish among all of the many grades of the voluntary and the involuntary, but even so it is the presence of a kind of consent in the case of our cries that sets them apart from mere noises. After all, “giving ourselves over to” these is the condition of their bringing us the pleasure or the comfort that they unquestionably do bring, even though our cries of erotic ecstasy may be, typically, directed only to ourselves and one other and our cries of pain perhaps only to ourselves.

Secondly, their intermediate status may suggest stages in the transition to verbal speech from our mute though posturally and gesturally eloquent mindbodies, serving thereby further to underscore the carnal origins and ineliminable corporal setting of the former. These cries and groans, even though, like our verbal speech, audible, are no part of our formal verbal language. Therefore they may be thought to be closer to the merely visible mindbody and its merely visible gestures than to its formalized audible speech. Yet being audible, these cries go beyond the merely visible gesture and its logic in the direction of speech and its own but cognate logic. Lacking an explicit formal semantic dimension, their relation to the mindbody is likely to be perceived as more intimate with and less alienable from it than our spoken words.

From consideration of this admittedly arbitrary classification of types of relation between the gestural and the verbal we turn to what I shall simply call the *language of gesture*—the shrugged shoulders, the wink, the sigh, the heavenward roll of the eyes, etc., etc.—where meanings are conveyed with an economy and nuance not possible through any other means, as we saw in the case of Piero Sraffa’s remark to Wittgenstein.

The language of gesture is of particular interest in this essay since it is an inextirpably integral part of our most familiar, quotidian speech-acts, a natural, if not a necessary, element in our viva voce verbal discourse. Since Ong’s claim that “speech leaves no discernible direct effect in space” precipitated these reflections; since the affiliation in some more than merely extrinsic way of obviously *spatiotemporally situated gestures* with verbal speech entails *spatiotemporally situated spoken words*—a common *wherein* for our gestures and our words to be; an exploration of some of the relations of

gesture and word in our routine acts of speech and of the application of differing uses of 'space' and 'time' to the description of these relations will be a further contribution to our seeing how Ong's claim cannot possibly be true as it stands.

I have argued of course that my mindbody is *the* paradigmatic place from which radiate efferent pretensions that found the world and provide the terminus a quo for orientation within the world thus founded. In this view my mindbody is at once dynamic *ground* and *provenience* of space and time, in each of several senses, and is dynamically *in* them, in each of several. The many different modes of my being in space and time—to cite but a few: where I am an extended object among objects in (visual) space; where I appear with and in my personally owned words in the space of our mutual appearance wherein they and I are taken up and endorsed by you; in the "political" space where speech-acts, observing the felicities for such, effect performatives; in the audial space I share with the vaulting sounds of the toccata and fugue until they disappear from sound; and so on almost ad infinitum—all of these modes of being in space and time are pretended from my primordial *place* and all retrotend in turn this selfsame *place*. To put the case in a different way, my many uses of the words 'space' and 'time' have their origin in and derive their penultimate authority from my being in these several modes; but their ultimate authority is grounded in the alternating pretension from and retrotension to my primordial *place*. When therefore I say, above, that the affiliation of spatiotemporally situated gestures with verbal speech entails a common *wherein* for our gestures and words to be, the *surface wherein* of the speech-act, where gesture and word are integral to each other, alludes to the *depth wherein* of my primordial *place*. If the word 'space' has a privileged use, it is "space" as *this* place.

In the case of my mute but visible gesture, let us say shrugging the shoulders, we have a spatiotemporal gestalt whose setting is my visible mindbody, bearing and bodying forth this gestalt. This mindbodily medium endures, in that sense of 'endure' applicable to my mindbody as one object among other enduring objects in visual space, after the motif that is my gesture has itself long since come and gone.

In the case of my invisible words we have a "spatio"-temporal gestalt whose setting is no less my mindbody, but one whose characteristic medium is sounds. These sounds do not endure in the way in which their source endures. From this it does not at all follow that my speech could not have a "situation" in space. As a mere series of sounds, as we have seen, it

appears in the space where the bonds of pretension and retrotension are graven upon our jointly appearing mindbodies at the point of their coition with one another and the world. As personally owned speech-acts they are manifest in the space of our mutually appearing to one another as persons. And in *this* space our speech-acts, if subject to the felicities, can, by means of the appropriate performatives, institute a covenant, *as palpable a reality as there can be*. Does my speech then leave a "discernible direct effect in space"? Yes. At least in all of these ways. What my fugitive, sounding speech does *not* do is to leave discernible direct effects in that space wherein its source, according to an abstract picture, is represented as being, an object among objects in visual space.

Clearly it does not follow, then, from what we take in this culture to be the peculiar evanescence of sound, the medium of my speech, when compared with what we take by contrast to be my enduring mindbody, that speech leaves no discernible direct effect in space. Our inclination to perceive as a deficiency this relative transiency of speech as fugitive sound is almost wholly a function of our judging the matter from the standpoint of that kind of durability that we impute to the world of seen objects, to ourselves as seen objects among seen objects, and to the word, written and printed to be seen.

Why do I find myself driven to these extraordinary dialectical exertions by what from one point of view is a perfectly innocent remark from Ong? Am I not belaboring the obvious? Is there really anyone who, if awakened in the middle of the night and asked: "Does speech leave a discernible direct effect in space?" would not say: "Why, heavens, yes"? No, it is not likely. Yes, all this is just too obvious. Ong's statement, uttered in the service of drawing a distinction between the spoken word and print, is really not very far from common sense—written out, we may suppose, with a certain carefree innocence of there being high philosophical stakes at issue. And yet we see, upon looking more closely, a veritable Cartesian mare's nest—not Ong's, not only Ong's, but our own, our culture's. And it is not innocent; nor is it benign. It has made us moot. On its account we are not only dangerous; we have become endangered—in no respect more so than in our growing somnolence in face of this effect.

Notes

PROLOGUE

1 Richard Wilbur, "Giacometti," in *The Poems of Richard Wilbur* (New York: Harcourt, Brace and World, Inc., 1963), 163.

2 Edmund Keeley and Philip Sherrard, Foreword to *George Seferis: Collected Poems (1924-1955)*, trans., ed., and intro. Edmund Keeley and Philip Sherrard (Princeton, N.J.: Princeton University Press, 1967) vii-viii.

I

1 Michael Polanyi, *Personal Knowledge: Toward a Post-Critical Philosophy* (Chicago: University of Chicago Press, 1958), 160. Hereafter cited in the body of the text as *P.K.* I have retained the British spelling of the word 'premiss'—and indeed the British spelling of other words—when it is quoted from the text of Polanyi's writings. In using the word(s) myself the American usage has come more naturally.

2 I have used this vague word 'picture' quite deliberately and with some trepidation. I want, if possible, to induce you by means of this usage to attend reflectively from time to time, as you read, to the way you find yourself being mindbodily in the world with the words of this text and their meaning. Ask yourself: "What is the gestalt of which I perceive myself to be a part, how would I depict that gestalt, what is the picture in the midst of which I find myself?" For of course it will be part of my argument that one's way of being mindbodily present in the world with the written or printed words of a text, no less than with our second-order, reflected *account* of our activity of existing in the world, including our activity of knowing, is a function of the "logic" of this picture. Since the picture has a "logic" it must then have "implications": it will include and exclude possible ways in which meaning might appear and be embodied. Furthermore, I have used 'picture' rather than 'image,' 'concept,' 'model,' 'metaphor,' 'analogy,' and, indeed, many another word signifying a gestalt of meaning, a "shape" of sense, each of which possesses a certain felicity, because I believe 'picture' can comprehend all these other notions while still inviting the most concrete kind of reflection on your part. There are indeed perils for me in this. The obvious affiliation of the word 'picture' with the word 'see' may be a seduction. Perhaps a tactile, proprioceptive, or audial "picturing" would serve better, if such could be embodied in the medium of a printed text such as is just

now before you. But since I am asking you to reflect, to “turn back upon” the way in which you and I are in the world, the use of a *form*—that is, a reflected shaping—of our experience of seeing, is inevitable, it being the sense by means of which we are able most fully to draw away from the primordial fact of our being prereflectively in the world. I would willingly, for reasons that will gradually appear, dis sever the word ‘picture’ from its familiar affiliation with the words ‘see’ and ‘draw’ in their everyday use: for example, by speaking of Mozart’s G Minor Quintet, K. 516, or J. S. Bach’s *A Musical Offering* as audial pictures; by speaking of my possession of a motor skill like the game of tennis or the art of glassblowing as my having and being in the midst of a proprioceptive picture; by speaking of my orientation to the environment of smells as possessing and dwelling in an “olfactory picture”—an “odorscape,” as W. H. Auden has wittily called it—or by identifying my “knowing how to go on” when given the series “1-3-5-7 . . .” as my “having a picture,” as when we say: “Ah. Now I’ve got the picture” (See Ludwig Wittgenstein, *Philosophical Investigations* [New York: Macmillan, 1953] paras. 151, 179.) Clearly, there are important disanalogies among even the above cases. I invite the reader even so to remark, then to dwell in, and finally, as he reflects, to rely upon these analogies in order to begin to sense the “logic” of the picture of his own being in the world, which he at once *has* and is *in the midst of*.

3 Indeed this is the picture of someone who stands “in the instant” to the fact of his own mindbodily being in the world, to the world itself and even to his own act of reflection upon them in a relation analogous to that in which the God who made them all from nothing is believed to stand; namely, as the actor par excellence who can only be known in his actions, hence thought to “be manifest” in the contingent actualities of the creation, even though his being is *not reducible* to the mere sum of the acts by which he makes heaven and earth in making these contingent actualities.

4 The etymological root of ‘assume’ and ‘assumption’ is ‘sumption,’ from the Latin *sumere*—to take, borrow (as clothes), put on. An assumption, then, is a taking for granted. See Eric Partridge, *Origins: A Short Etymological Dictionary of Modern English* (New York: Macmillan Co., 1958). There is a useful ambivalence of meaning between the verbal, hence active, form ‘to assume’ and the substantival, hence passive, form ‘assumption.’ To assume is sometimes *actively to take up*, borrow, sometimes passively to take for granted, simply to wear the clothes we have already actively put on. ‘To assume’ may mean either of these; and usage preserves this ambivalence of meaning. Furthermore, it almost exactly reproduces the logical-ontological “structures” of the tacit-explicit, relying upon—directed toward, attending from—attending to, proximal-distal, clues—joint meaning distinctions found throughout Polanyi’s writings.

5 It is important that as you read these words you should let the full force of the dynamic images of the *activities* of “taking,” “relying upon,” “stating,” “taking up,” and “laying claim to” have their way with your mindbody, at this very moment contemporaneously present with the words of the text.

6 See note 2 above.

7 Re-reading these words after having set them aside for a while, I try to reestablish my now attenuated relation to them and their meaning. Doing so, I am aware of making a kind of imaginative “psychosomatic” or mindbodily movement of incorporation. I allow myself to “experience” the virtual motility and intentionality of my own unreflectedly immediate mindbody as the medium for indwelling the structure of being-knowing, thereby to grasp the

meaning of the claim that my way of *knowing* in the world is a reduplication of my way of *being* in the world.

8 The root of 'reflect' is the Latin *flectere*, "to bend, curve (inward)," which with *re* means "to bend back, to turn again." Partridge, *Origins*, 220.

9 Speaking in this way about a person's relation to his own being will appear odd to you only if you forget that our endorsement of our own existence is not something that can be taken for granted. Various forms of psychopathology—the rejection of some aspect or other of our own sexuality, say—attest to the contingency of our relation to ourselves. Perhaps advanced schizophrenia attests to a refusal of being in the world. Suicides of a more dramatic and eschatological sort surely suggest that we do *consent* to being, since it is always possible for us to *refuse* being absolutely. The burden of proof, therefore, would rather appear to be upon those who would wish to claim such data are without import for philosophical anthropology, epistemology, and a theory of being. When therefore we *assume*—either in the passive sense of "taking for granted" or in the active sense of "taking up"—we are making an *affirmation*, either tacitly or explicitly, whether this be of a premise of thought, the "condition" of an act, or the "act" itself of persisting in being from one moment to the next.

10 I have placed several of the words in this passage in double quotation marks to alert you. Whatever may be the sense you spontaneously assign to these words as you read, consider whether it is the same as my sense.

11 The *literal* meaning, that is, we might suppose, the etymologically radical meaning of 'literal' would have to be "by the letters." But 'literal' taken by the letters, i.e., taken as 'l. i. t. e. r. a. l.', is *not even a word*. On this etymologically strict account there could *be* no literal meaning of a word. Indeed, as we see, the literal meaning of the word 'literal' is metaphorical!

12 In using this deliberately vague expression I have wished to preserve a sense of the "family resemblances" among uses of the word 'logic,' while greatly loosening the informal rules that govern them. I also wish, so far as possible, to avoid using the word 'logic' itself, in the midst of my critique of its rather more restricted uses. The colloquial 'hanging togetherness' allows me to suggest that different sorts of things can be seen to cohere, to comprehend particulars, exhibit order, have a "logic," imply, and be implicated with other things in terms of many different models, without rigging the discourse overwhelmingly in favor of (formal) "logic."

13 Jean Piaget, *The Principles of Genetic Epistemology*, trans. W. Mays (London: Routledge & Kegan Paul, 1972), 12–13.

14 I have devised this coinage in order to avoid the English usage that would ordinarily seem natural here, namely, 'explicable.' The English derives from the Latin adjectival form, *explicabilis*, meaning "that may be explained or accounted for." This obviously has a common radical with the English adjective 'explicit,' meaning "developed in detail, leaving nothing merely implied." My coinage, 'explicitable,' means "able to be developed in detail, capable of being fully unfolded," which is importantly different from "that may be explained or accounted for."

15 For example Polanyi says: "Swimming may be said to *presuppose* the principle of keeping afloat by retaining an excessive residue of air in the lungs" (*PK.*, p. 162; emphasis added). The "logical" infelicity of this formulation testifies to Polanyi's unwitting conceptual reform. One might say instead: "Swimming relies acritically upon the fact statable as the

principle that if we retain an excessive residue of air in the lungs, then. . . ." Or: "When I swim I rely acritically upon. . . ."

II

1 One wonders if, instead of the noun forms 'beliefs' and 'valuations' a formula such as 'actual believings' and 'actual valuing', though awkward, would not have kept this account closer to verb forms and therefore closer to being a representation of the fact of human knowledge as the outcome of *acknowledging affirmations of actual feats of knowing achieved in time*, thereby reducing the extent of the alienation of our *accounts* of our feats of knowing from those *actual knowings*.

2 Michael Polanyi, *The Tacit Dimension* (Garden City, N.Y.: Doubleday and Co., 1966), 33. Hereinafter cited as *T.D.*

3 Consider: "The performance of a skill can . . . be regarded as a logical operation by regarding a skillful co-ordination of several moves as a process of construction, like the construction of a triangle from three elements. Here integration takes the place of operations by ruler and compass." And further: "My view is that the use of language is a tacit performance: the meaning of language arises, as many other kinds of meaning do, in tacitly integrating hitherto meaningless acts into a bearing on a focus that thereby becomes their meaning. I would try to trace back the roots of this faculty to primordial achievements of living things. All animals are capable of tacitly integrating their bodily actions: indeed, meaningful integration can be found in the very process of coherent growth. But I shall refer here only to the intelligent forms of this power, as exercised by higher animals" Michael Polanyi, "Sense-Giving and Sense-Reading," in *Intellect and Hope: Essays in the Thought of Michael Polanyi*, eds. T.A. Langford and W.H. Poteat [Durham, N.C.: Duke University Press, 1968], 417-19.

Ludwig Wittgenstein is suggesting some cognate conceptual innovations when reflecting upon the "grounds" for certainty. He evidently wishes to extend the concept of 'logical' grounds to include as well something more primordial when he says: "I want to conceive [a comfortable certainty] as something that lies beyond being justified or unjustified; [beyond, that is, any appeal to explicit or explicable logical premises] as it were, as something animal" (*On Certainty*, eds. G.E.M. Anscombe and G.H. Von Wright; trans. Denis Paul and G.E.M. Anscombe [New York: Harper and Row, 1972], para. 350). The "logical" continuity for Wittgenstein between the tacit logic of our skillful manbodily doings and the explicit logic of our putatively strictly "intellectual" feats of inference-drawing according to a formalism is further suggested by: "The squirrel does not infer by induction that it is going to need stores next winter as well. And no more do we need a law of induction to justify our actions or predictions" (*ibid.*, para. 287). And finally: "I want to regard man here as an animal: as a primitive being to which one grants instinct but not ratiocination. As a creature in a primitive state. Any logic good enough for a primitive means of communication needs no apology from us. Language did not emerge from some kind of ratiocination" (*ibid.*, para. 475).

4 As he so much as says in "Sense-Giving and Sense-Reading." And once again, one finds Wittgenstein making a cognate suggestion. He says: "If I say 'We assume' that the earth has existed for many years past (or something similar), then of course it sounds strange that we should assume such a thing. But in the entire system of our language-games it belongs to the foundations. The assumption, one might say, forms the basis of action, and therefore, naturally, of thought" (*On Certainty*, para. 411, emphasis beginning with "But . . ." is mine).

III

1 So resistant to correction is this misleading picture that I have had graduate students who had long since grasped, at the explicit level, the import of it for our account of our knowings, but who, nevertheless, fell again under its bondage in the midst of philosophical practice. In this respect they were like learners in tennis who knew the correct way to execute a backhand and who appreciated the superior logic of the pro's form compared to that of their own, but who when playing lapsed into the old ways and netted the ball or drove over the baseline. And again it is a further result of our Enlightenment picture that we should not be inclined to depict doing philosophy as being analogous, as a practice, to playing tennis. We tend to assume, in light of this picture, that all that is required in philosophizing is a mere *intellectual* appropriation; that there is no need for reflected understanding to be integrated to a practice, in the way that what we hear from the tennis pro has to be integrated into our game by *practice*.

2 Wittgenstein's way of making a cognate claim is to say: "In the entire system of our language-games [the "assumption" of the existence of the earth for many years past, i.e., Polanyi's "presuppositions of factuality"] belongs to the *foundations*. The *assumption*, one might say, *forms the basis of action*, and therefore, *naturally, of thought*" (*On Certainty*, para. 411; emphasis added).

3 I have placed the phrase 'the subject' in quotation marks, again, as a warning. I need some vague and, so far as possible, conceptually noncommittal way to refer to the very general phenomenon among men of knowing/knowledge. Yet obviously part of my argument is precisely that what one finally takes the phenomenon, in fact, to be is very much a function of whether, to take the simplest example, it is reflected through the medium of the concept 'knowledge,' which paradigmatically would make us construe 'the subject' substantivally, or in the medium of the concept 'knowing' whereby, since it is a verb form, 'the subject' is construed as an activity or a process. This being the case, the question as to the nature of "the subject" very much depends upon which of the options is "chosen" as we reflect. I trust it is clear that, though I believe the philosophic tradition of the West, especially since Descartes, is heavily committed to a substantival view of "the subject," that I neither assume that any *conscious* option in this matter has ever been exercised nor that even among writers on epistemology, whom we should take to be typical of this tradition, one would find explicitly stated any such exclusive disjunction as my simple formula would suggest. Nor, finally, am I implying that any reforms are required in our ordinary uses of the word 'knowledge.' The same words will continue to be used but they will now work differently, or at least we will be alert to this nuance.

4 In quite another connection Maurice Merleau-Ponty makes the point somewhat differently: "Speech and understanding are moments in the unified system of self-other. The sub-stratum of this system is not a pure 'I' . . . , but rather an 'I' endowed with a body which reveals its thoughts sometimes to attribute them to itself and at other times to impute them to someone else. I accommodate to the other person through my language and my body. Even the distance which the normal subject puts between himself and others, as well as the clear distinction between speaking and listening, are modalities of the system of embodied subjects" (*The Prose of the World*, trans. John O'Neill [Evanston, Ill.: Northwestern University Press, 1973], 18).

5 See for example Descartes's *Principles of Philosophy*, Pt. I, VIII: "We clearly perceive that neither extension, nor figure, nor local motion, nor anything similar that can be attributed to body, pertains to our nature, and nothing save *thought alone*; and consequently, that the *notion we have of our mind precedes that of any corporeal thing, and is more certain*" (emphasis added).

6 Why should I not say: "when I read I am listening, when I write I am speaking"?

7 Does not *this* way of breaking up and ordering the succession of my words embrace me in a different picture of my own way of being in the world "behind" my act of writing, different from that afforded by a more "rational," a more "lucid," a more explicated-rule-governed mode of punctuation? And insofar as you consent to indwell my written-down words, do you not in turn give yourself over to this same picture?

IV

1 I wish entirely to bracket out of this discussion the vexed sort of realist-nominalist controversy as to whether these words as we use them express the connectedness of things in themselves or whether they rather *constitute* that connectedness. This question will not arise; at least, it will not arise in this form, if the conceptual revisions carry conviction that, following Polanyi's hint, I am proposing.

2 This whole case could be made differently. It could be said, with equal felicity, that the word 'time' is used differently in each of these cases: when we speak of my mindbody's endurance through "time," when we speak of the causal integration of its several parts in "time," and when we speak of its exhibiting a certain "temporal" style.

Throughout these passages I have, as throughout this meditation as a whole, employed quotation marks around words to call particular attention and alert the reader to my deliberate and what I take to be philosophically telling equivocation upon what might be taken as their standard use.

3 Both 'motif' and 'motive' derive from L.L. *motuus*, M.L. *motivus* (capable of moving). These become O.F-F *motif*. And this becomes 'motive' in English (Partridge, *Origins*). It is by an appeal to my "motives," to what it was that "moved" me, that the moral quality of an act will be judged. An architectural or pictorial "motif" or "motive" is an enduring spatiotemporal configuration that siezes, holds, and "moves" (or arrests, that is, moves to stop) the eye. A musical "motif" or "motive," with its melodic shape, tempo, and intentionality, magnetizes our mindbodies therein to "move" them. But "motif" and "motive" not only *serve* to move; they *are* "movements." They may be regarded not only from the standpoint of what they *do* and *how* they do it, addressed to the tonic being of our mindbodies; they may also be viewed by reference to what they *are*, the nature of their mode of figuring, their way of bodying forth meaning in that in which they appear, their style of establishing and expressing connectedness. Then, for example, we see a "motif" (as also with the motive that moves me to an act) as that that integrates its particulars to a moving totality, such as an act or a musical theme. As we contemplate the *comprehension* in view of which the particulars—musical notes, constituent acts—jointly realize and resolve (as in the playing of a musical theme it is "resolved") the motif or motive, we think of the motif as actively integrating its particulars to itself from moment to moment by unfolding itself in time. At the same time a "motif" can be thought to be *just* that integral totality *grasped as accomplished*, but retaining its temporal thickness.

When therefore I use 'motif' and 'motive' to refer to the temporally ordered configurations exhibited by my running mindbody, I want to distinguish the temporally unfolding "connectedness" or "hanging togetherness" of the elements of a *style* from both the temporally co-present or contemporaneous elements of my *enduring* and (during my jog) *unchanging* body and the *temporally unfolding* "hanging togetherness" of my *causally* integrated mindbody.

4 I seem to be speaking here as if I actually have *reflective* access to such prereflective, primitive, contingent "entities" (since I am talking about them). Of course I do not believe this. However here, in reflection, I am sketching out a picture from my imagination that I hope will induce in you a certain way of picturing the relation between our sensory awareness and its prehistory.

5 What I mean, in this account, by saying of the particulars before my sight that they are at once *sensuously* and simultaneously co-present is that they are "before" my eyes simultaneously in (visual) space. For two points to appear simultaneously in (visual) space is not the same as for two notes, *one after the other*, to appear simultaneously in time, even though the use of 'simultaneity' is appropriate in both cases.

6 Hans Jonas, *The Phenomenon of Life* (New York: Dell Publishing Co., 1966), 144ff.

7 *Ibid.*, 150; emphasis in original.

8 For example: "If we get our awareness of parallelism through *touch*, as by running our fingers along a simple molding; there is no question of sensuous return that parallel lines do not meet. If, however, we get our awareness of parallelism through *sight*, as when we look down a long colonnade, there is no doubt about the sensuous return that parallel lines do converge and will meet if they are far enough extended. . . . It was not until the seventeenth century that for the first time a mathematician adopted convergence at infinity as the basis of a definition of parallel lines" (William M. Ivins, Jr., *On the Rationalization of Sight* (New York: Da Capo Press, 1973), 8; emphasis added).

9 Merleau-Ponty, *Prose of the World*, 149–150 (emphasis in original).

10 Wittgenstein, too, was captive to the same picture when he wrote: "If I wrote a book 'The World as I Found It,' I should also have therein to report on my body and say which members obey my will and which do not, etc. This then would be a method of isolating the subject or rather of showing that in an important sense there is no subject: that is to say, of it alone in this book mention could *not* be made. . . . *Where* in the world is a metaphysical subject to be noted? You say this case is altogether like that of the eye and the field of sight. But you do *not* really see the eye. And from nothing *in the field of sight* can it be concluded that it is seen from an eye" (*Tractatus Logico-Philosophicus* [London: Routledge & Kegan Paul, 1922], 5.61, 5.633; emphasis in original).

11 I draw the distinction here between "objects" and objects to indicate the difference between what my eyes see when what they see is as yet somewhat indeterminate for vision and when what they see is determinate and no longer "ambiguous"—assuming such a state is ever achieved.

12 'Object' derives from the Latin *objectum*, "a thing thrown, put before [one]" (Partridge, *Origins*).

13 Let us not forget that the meanings of 'to the left of' and 'to the right of' originally derive from and can be retained only through their relation to the primordial reality of our mindbodies in the world.

14 St. Augustine, *Confessions*, IX, xiv.

15 Let it be noticed that even though undoubtedly the “logic” of chords and of melodies is inconceivable apart from the ways in which they sonantly move the living mindbody, they do in fact have an explicable musical logic expressible as the eight-tone, twelve-tone serial scale or some other as yet unimagined alternative.

16 I have placed ‘orchestra’ in quotation marks here, since we may legitimately wonder whether, under the prescribed circumstances, the concept ‘orchestra’ is appropriate. A mere mélange of instrumentalists the sole organizing principle among whom is that they each are scheduled to play one note from the score of *Don Giovanni* does not make an orchestra; nor does a similar assortment of singers constitute a “chorus.”

V

1 This is a claim that Polanyi makes in these very words. See p. 4 and passim in *The Tacit Dimension*.

2 I have devised this coinage as the correlate of ‘pretend,’ which means “to stretch forward.” ‘Retrotend’ means “to stretch back or backward.” This correlation of terms serves to call attention to the analogy obtaining between the lively “temporal thickness” of a heard melody and the tonic temporal thickness of our mindbodies—that that we “know” but readily forget—upon which the former is parasitical. I want to suggest that *do* in the solfeggio scale pretends *re* and *mi*; and that *mi* retrotends *re* and *do*. All of this has seemed required in order temporarily to suppress the vision-oriented imagination’s tendency, picturing them as if in “space,” to think of sounds as *partes extra partes* as things may be conceived to be in (visual) space.

3 It is both useful and true to speak of my mindbody as musical, as melodic. However, my mindbody is not musical *as is the song I sing*; even less as is the song I compose. Both of the latter are enlargements of my sentience, orientation, and motility and therefore *derivations* from them. Inasmuch as this is the case, the song I sing and even more the song I compose have a less immediate relation to the pretensive-retrotensive structure of my immediately existing mindbody.

4 The sounding of a particular note in a piece of aleatoric music (whatever the aspiration of composers to produce “music” comprised of randomly propagated tones) is of course very far from being subject to no determination whatever. This will be seen to be self-evident once it is remembered that the music has after all been scored. Though the motif implied in it may be so complex as to be quite beyond the capacity of my imagination to grasp it entire by a simple inspection of the score, so that the actual hearing of a succession of different performances will present me *de facto* with a series of novel pieces of music, even a very long such series, the composition even so can only admit of a finite number of such pieces. If therefore the probability of any given note’s being sounded in the performance of a piece of aleatoric music is of a very much lower magnitude than that a given note in the score of Bach’s First Prelude in C will be, it still cannot become a matter of pure chance.

By way of illustration: Suppose I were to compose an aleatoric piece for two violins, piano, and percussion. I would give to each performer a score for his instrument(s). This might consist of ten musical themes—A through J. There need be no key signatures, no tempi. Each performer would be instructed by this score to play one or another of the themes A through J

for a period of thirty seconds and to follow this with a performance of either the same or another of the ten themes for twenty seconds, followed by either another or the same for thirty seconds, and so on, until ten sequences of notes shall have been played. One could make pieces of this sort far more complex than this one, but no process of complexification could ever produce the result that the sounding of a given note would come to be a case of pure chance. Indeed of a "sequence" of notes alleged to be occurring by chance it would be equally meaningless to say either that they were a simple or a complex sequence. Even if one were to abandon all scoring except instructions to two violinists, one pianist, and a percussionist to appear at roughly a certain place at roughly a certain time and to play entirely *ad libitum* for roughly, say, forty-five minutes, the notes that could be played—even were they subject to no other motives—would be subject to the "motif" implicit in the tonal range of the several instruments in use.

5 Eric Newton, *The Romantic Rebellion* (New York: St. Martin's Press, 1963), 23 (emphasis added). It is not without significance for my argument that we can readily imagine a kind of intermediate case between Newton's contrasts of painting and music: namely, an *animated* "drawing" or "painting." In such a case, one could easily move from the articulation of a "classical" image that, *in time*, developed "romantic growths."

6 Søren Kierkegaard, *Either/Or*, trans. David F. Swenson and Lillian Marvin Swenson, with revisions and a foreword by Howard A. Johnson (Garden City, N.Y.: Doubleday and Co., Anchor Books, 1959), 2 vols.

7 *Ibid.*, 66.

8 *Ibid.*, 55; emphasis added.

9 *Ibid.*, 59.

10 I have followed Kierkegaard and his translators in using the words 'psychically determined.' I have departed from them in substituting 'pneumatically' for 'spiritually' determined. One can make sense of this contrast in Kierkegaard/A's analysis of the contrasts Classical-Christian-Modern only by opposing the Greek *psyche*, its use deeply imbedded in the logical matrix of Greek metaphysics, to the word *pneuma* with its special and profoundly altered meanings affiliated, say, in St. Paul's writings, in the Septuagint, and even in the Vulgate as the contrast *anima-spiritus*, with the linguistic-conceptual repertoire coming out of the collision and alteration of Greek and Hebrew in the intertestamental period. See Werner Jaeger, *Early Christianity and Greek Paideia* (Cambridge: Harvard University Press, 1961).

11 Kierkegaard, *Either/Or*, 66.

12 *Ibid.*, 66.

13 *Ibid.*, 55; emphasis added. This is to say that the "time" during which the motifs within which the particulars of music are shaped by a motif *into* that motif and that is also the "time" within which we perceive this to be happening is *not* the "time" in which history has its being, namely, the "time" within which lively speech occurs.

14 For example, Paul Hindemith.

15 Maurice Merleau-Ponty, in his essay "The Child's Relations with Others" (*The Primacy of Perception*, trans. by various hands, ed. James M. Edie [Evanston, Ill.: Northwestern University Press, 1964], comments obliquely upon some cognate issues found here. He says: "For the child, understanding the specular image consists in recognizing as his own this

visual appearance [of himself] in the mirror. Until the moment when the specular image arises, the child's body is a strongly *felt* [my emphasis] but confused reality. To recognize his image in the mirror is for him to learn that *there can be a viewpoint taken on him*. . . . Through the acquisition of the specular image the child notices that he is visible, for himself and for others. The passage from the introceptive *me* to the visual *me*, from the introceptive *me* to the 'specular I' . . . , is the passage from one form or state of personality to another" (p. 136). Did anything less dramatic and decisive happen in the moment that modern Western man achieved a specular image of himself in the universe in the mirror (I should say, picture) of Copernicus? In that mirror we beheld ourselves looking, *as spectators*, at our home, the earth, one planet among others, swinging with others in its orbital path, reckless of us, and imagined that we could now at last "see ourselves even as already we are seen." Surely the imaginative ground for the emergence of this Copernican mirror was laid in the proto-linear perspective of Giotto's anonymous precursors and even before that in the conception of a God who stands to the (created) world as a personal being who by his words calls the world into being out of nothing.

16 To be sure, 'happen' comes from the Middle English *hap*, meaning "an event exemplifying chance" (Partridge, *Origins*). But surely the very same lexicographer who tells us this is justified in drawing a distinction, in his definitions of *contingere* in its transitive form, between "happening" (in each of several senses) and "happening by chance," since this distinction certainly exists for contemporary usage. This interpretation is clearly sustained by the *O.E.D.*'s entry for 'happen,' which gives the first meanings as: to come to pass, come into being, take place.

17 We should certainly view the case differently if we believed that the moving of particular fingers and the sequence of the moving of these fingers were strictly dictated by the sequence of notes to be sounded, by, in other words, the fingering requirements of the composition; if we believed what is obviously not the case, that Bach's Prelude exhausted every single possible combination and permutation of the eight-tone scale; and if we believed that no alternative tonal schemata to the eight-tone scale were conceivable.

18 I am not unaware of some possible question-begging in my very use of the word 'tone.' To designate *sound* with the word 'tone' is already to give it a context: the eighty-eight keys of a standard piano, my ears, inured to the Western musical tradition and therefore possessed at least of a kind of proto-motif. It may well be that contingency as radical *underivability* is more difficult for us to imagine than we suppose.

19 One could equally employ the following example. With a pair of ordinary gaming dice it is possible to compute with mathematical exactness a finite number of combinations and permutations of turned-up die sides. We could specify each single possible such combination of turned-up sides, labelling one die A, the other B, and indicating what number, 1 to 6, the turned-up side bore; and we could also specify the finite number of such combinations. Any game of dice we actually played whether it took ten minutes or ten years would be one in which every toss of the dice would be subject to a motif. And if we rolled in order every single possible combination once and only once, what would have happened would be under the sway of the same motif. But there could be no *absolute* novelties here; only *relative* ones. If however we were to obliterate one face on a single die and stipulate that in any sequence of rolls of the dice the blank side would be "wild," i.e., that any number could be assigned to it, there could be no finite number of turned-up die sides. Therefore if we "randomly" changed

the value on the wild side to a different number with every toss, we would produce *absolute* novelties *every time*.

20 The concept of 'causality' is surely derived from the contrast in our own experience between our voluntary and involuntary motility; from our experience, in short, of our own deliberate agency.

21 I have placed 'succession' in quotation marks in order to call attention to my sense that purportedly *absolutely contingent* events in the heard world, which on that account would be supposed to stand in absolute nonrelation to one another, cannot strictly be said to be *successive*. To be strict, our *absolutely* contingent events in a sonic world would each have to occur in a discrete moment with no temporal relation to any other moment; and each such moment could possess no temporal thickness in itself, else "parts" of the heard musical note would be temporally successive in relation to other "parts" of the note. This only serves further to confirm the claim made in the body of the text above that a "pure happening" can be conceived only as a total abstraction. This is why we are forced to recognize that the meaning of the radical other *as radical other* can only arise against the background of and be parasitical upon the irreducibly and antecedently given intentionality of my mindbody.

22 It is now quite apparent that the imagination of classical antiquity, especially that among its philosophers, was dominated by the logic imposed by the visual picture, very largely to the exclusion of those of the pictures abstracted from the phenomena of other sense modalities. It is hardly too much to claim that the notion of pure being, *ho pantelos on*, is conceivable only in a slice of dead (visual) space. Therefore that *particular sense* of the distinction between essence and existence, necessity and contingency, *governed by the logic of the visual picture*, has been the principal legacy for our philosophic tradition. Epistemologists and ontologists to this day have either uncritically acquiesced in the logic of this picture or else struggled against it like flies in a fly-bottle.

VI

1 This claim, it should be remembered, is made subject to the caveat issued above that even the "absolutely contingent" requires as its setting and premise the given mindbodily sense and meaning of which it is oppugantly *the other*.

2 I have used 'suasion' here, as I have used expressions throughout such as 'subject to . . .', 'under the reign of . . .', 'governed by . . .', 'under the sway of . . .', all political metaphors, having the virtue therefore of reminding us of the most obvious fact of all: that the context of language, hence of the *logic* of language, as indeed of that of men, is *inter homines esse*. Wittgenstein's emphasis upon the intimate connection between the meaning of a word and its use is valuable here. His polemic against the "hardness of the logical must" (*Philosophical Investigations*, para. 437) gets its footing by reminding us that the meaning of a word is its use in a language game, as "the meaning of a piece [in a chess game] is its role in the game" (*ibid.*, para. 563). And he says: "We want to say that there can't be any vagueness in logic. The idea absorbs us, that the ideal '*must*' be found in reality. Meanwhile we do not as yet see *how* it occurs there, nor do we understand the nature of this '*must*'. We think it must be in reality; for we think we already see it there" (*ibid.*, para. 101; emphasis in original). I too wish to mitigate our belief in the "hardness of the logical must," since it is a profound, and by no means a benign, misrepresentation of our thought, being a product of the

hypertrophication of the image of a very large but finite text beheld by vision, depicted as it has been in my phenomenological analysis of our accounts of seeing, both of them alienated from their setting in our tonic mindbodies in their world.

3 The distinction between these two ways of making the case is worth remarking. My tonic mindbody exigently demands sense, order, and meaning, *beyond merely providing the setting and premise of sense and meaning against which the oppugnant other-than of randomness may appear*. It therefore could not fail to seek some kind of *musical sense cognate with its own existential integrity*, even in the purely random notes of aleatory music as I have defined it, confronted by the rich color of brasses, strings, woodwinds, and percussion, addressed to it by an orchestral performance. By contrast the mathematical case given in the gaming dice illustration, to be sure no less addressed to my mindbody, but engaging it only in the most abstract of ways, offers but a minimal challenge to the demand out of its own tonic integrity for an answering integration in what is placed before it.

4 Surely Wittgenstein had something analogous in mind concerning induction when he said in *On Certainty*: “‘I know’ expresses comfortable certainty, not the certainty that is still struggling” (para. 357). “Now I would like to regard this certainty, not as something akin to hastiness or superficiality, but as a form of life” (para. 358). “But that means I want to conceive it as something that lies beyond being justified or unjustified; as it were, as something *animal*” (para. 359; emphasis added). And again: “The ‘law of induction’ can no more be *grounded* than certain particular propositions concerning the material of experience” (para. 499; emphasis in original). I am of course going further than Wittgenstein, since I am claiming that even if the law of induction is not *grounded*, it is nevertheless, in fact, “grounded.”

VII

1 Here I have placed ‘physical’ and ‘object’ in quotation marks to signal the fact that together they have a different force in the context of discourse about audition and audible entities from that that they have in the context of discourse about sight and visible entities; I have placed ‘spoken’ in quotation marks to distinguish the act of vocally propagating an audible object into audial space from that of *meaning* an audible word; and I have treated ‘written’ in similar fashion to distinguish the act of engraving visible marks upon some surface from that of *meaning* an engraven visible word. A cognate warning needs to be issued: a “word” considered *merely* as physical and *merely* as an object, in either of the above senses, is not properly speaking a *word*.

Some care is required at this point lest in speaking of that by means of which verbal meaning appears in the world as *physical* we inadvertently shift the point of view of this inquiry. Clearly a spoken word is a sonic entity in the world like a musical note or the backfire of an automobile, as it is also a visible entity in the world when written down, like the bark on a pine tree or the “lettering” on a mailbox. My point of view throughout has been to conduct the inquiry *from within* my own existential mindbodily being, with its primordially given, unreflected intentional matrix, already pregnant with “meanings.” Our tradition sometimes, perhaps usually, predisposes us to alienate ourselves by abstraction from this *arché*, with the consequence that for example we may be inclined initially to view anything we call “physical” as first and last an object as it would be characterized by modern Western common sense: Mt. Everest, a monkey wrench. I do not wish to beg that question for I believe that ‘physical’

means many different things in various contexts. By referring to the physicality of a “word,” I want to approach it at first simply as a *thing* in the world independent of its capacity to bear verbal meaning, although even *this* thing is not context-neutral, but rather is relative to the context of the intentional matrix of my tonic mindbody.

2 Merleau-Ponty, *Prose of the World*, 149–50; emphasis in original. For contrast, see Richard Lannoy’s comment upon Ajunta cave frescos: “The seated queen with the floating hand is drawn so that we obtain information which cannot be had by looking at her from a single, fixed viewpoint to which we are conditioned by the artifice of optical perspective. This kind of tactile unified-field awareness is no mere quirk, but the product of an integral outlook common to societies which have not been conditioned by reading print. . . . It has been proved by optical experiments that people conditioned by tactile modes of perception tend to use scanning eye movements. In such cases, images are not taken in by a glance through focusing the retina on a point slightly in front of the picture plane, as a print-reading eye does. Rather, the viewer scans it piece-meal—not in perspective but *empathically*. This is confirmed by the indifference of the tactile artist to the single pyramidal tableau contained within a border, which is the commonest structure of the Western-type image” (*The Speaking Tree* [New York: Oxford University Press, 1971], 48; emphases added). The “single pyramidal tableau contained within a border,” where all of the particulars are sensuously simultaneously co-present in a finite space and the finite, atemporal “time” of their co-endurance, is the exact correlate of our picture of sight abstracted from the actual phenomena of seeing.

3 ‘Before,’ in our visually oriented sensibility, paradigmatically means “before” in that sense appropriate to “locating” an object, all of the parts of which are simultaneously present to the gaze, within the homogeneous quanta of dead (visual) space, which this sensibility, relying upon its reflective instruments, reflectively takes to be the existential setting of our tonic mindbodies. When therefore we use ‘before’ to speak of the relation between ourselves and a musical “picture” or the “picture” of a town plan, it is desirable to arrest our attention at this divergence by the use of the quotation marks.

4 Kent C. Bloomer and Charles W. Moore, with a contribution by Robert J. Yudell, *Body, Memory, and Architecture* (New Haven and London: Yale University Press, 1977), 15.

5 Erwin Straus, “Forms of Spatiality,” in *Phenomenological Psychology*, trans. in part by Erling Eng (New York: Basic Books, 1966), 3–37. The sense here of the opposition gnostic-pathic underscores an active noetic moment (*gnosis*, from the Greek *gignoskein*—to know) and a contrasting passive affective moment (*pathic*, from the Greek *pasko*—to receive an impression from without, to suffer, opposing to do, to act).

6 *Ibid.*, 11; emphasis in original.

7 *Ibid.*, 11; emphasis added.

8 *Ibid.*, 14.

9 I have used quotation marks here to indicate emphatically that I am not using these words as parts of an analytic physiology. *These* muscles, tissues, ligaments, and skeleton are the particulars of my integral mindbody as I “know” it “from within” as I am engaged in the quite commonplace activity of speaking.

10 In this connection Ruth Finnegan has observed: “We are so accustomed at our present stage of history, to associate the written word with print that we tend to forget that the mere fact of *writing* does not necessarily involve the type of detachment and relatively impersonal

mode of transmission that we connect with printing" (*Oral Literature in Africa* [Oxford: Clarendon Press, 1970], 18–19).

11 H. J. Chaytor, *From Script to Print*, quoted by Ruth H. Finnegan, *ibid.*, 19.

12 Jack Goody and Ian Watt, "The Consequences of Literacy" in *Literacy in Traditional Societies*, ed. Jack Goody (London: Cambridge University Press, 1968), 44.

13 Don Ihde, *Listening and Voice: A Phenomenology of Sound* (Athens, Ohio: Ohio University Press, 1976).

14 Goody and Watt, *Literacy in Traditional Societies*, 55.

15 *Ibid.*, 44; emphasis added.

16 *Ibid.*, 53; emphasis added. It is interesting to note that the philosophy of logic to be found within Wittgenstein's *Tractatus Logico-Philosophicus* could have been advanced only by someone whose thought is held captive by a picture of the relations that hold among words such as is implicit in the mind of an alphabetic culture with its "immutable and impersonal mode of discourse," and that would therefore "aspire to explain [the] meanings [of words] satisfactorily, and to relate these meanings to some ultimate [and I should add, *impersonal*] principle of rational order in the universe." Nor is it conceivable that a denizen of a preliterate society, were he able without literacy to devise and propagate a second-order view of what he does in speaking, would be likely to deliver himself of an account of linguistic meaning such as does Wittgenstein, in retreat from the hypertrophication wrought by his own literacy. In his *Philosophical Investigations*, he says: "For a large class of cases—though not for all—in which we employ the word 'meaning' it can be defined thus: the meaning of a word is its use in the language" (para. 43; emphasis in original). It is no exaggeration to suggest that from one point of view *Philosophical Investigations* and *On Certainty* were Wittgenstein's later efforts to redress the hypertrophy in his own imagination of the literate man's picture of language and meaning. Hence the interlocutory form of the latter two books.

17 Wittgenstein, *Philosophical Investigations*, para. 66; emphasis in original.

18 *Ibid.*, para. 30.

19 *Ibid.*, para. 437; emphasis in original.

20 *Ibid.*, para. 461.

21 Quoted in Goody and Watt, *Literacy in Traditional Societies*, 53; emphasis in original.

22 Goody and Watt, *Literacy in Traditional Societies*, 44.

23 *Ibid.*, 46; emphasis on *logos* in original.

24 Whatever illusions the Enlightenment may have suffered in this matter, under the sway of the mirror of Copernicus or of this picture of a very large but finite, eternal text in which all of the particulars are at any moment equally accessible, critics like Polanyi and Wittgenstein, in contrast, have shown that we enjoy no such "lucid" relation to our own system of implicit beliefs. Polanyi says: "We can voice our ultimate convictions only from within our convictions. . . . The process of examining any topic is both an exploration of the topic, and an exegesis of our fundamental beliefs in the light of which we approach it; a dialectical combination of exploration and exegesis. Our fundamental beliefs are continuously reconsidered in the course of such a process, but only within the scope of their own basic premisses" (*P.K.*, 267). Wittgenstein says: "Even if I came to a country where they believed that people

were taken to the moon in dreams, I couldn't say to them: 'I have never been to the moon.—Of course I may be mistaken.' And to their question 'Mayn't you be mistaken?' I should have to answer: 'NO'" (*On Certainty*, para. 667).

25 Goody and Watt, *Literacy in Traditional Societies*, 48.

26 *Ibid.*, 48.

27 *Ibid.*, 53.

28 Wittgenstein, *Philosophical Investigations*, para. 437; emphasis in original.

29 Cedric Whitman, *Homer and the Heroic Tradition*, quoted in Albert B. Lord, *The Singer of Tales* (New York: Atheneum, 1974), 154.

30 Goody and Watt, "The Consequences of Literacy," in *Literacy in Traditional Societies*, 39.

31 *Ibid.*, 39.

32 *Ibid.*, 40.

33 *Ibid.*, 40.

34 *Ibid.*, 40–41.

35 *Ibid.*, 44, 53.

36 Thorlief Boman, *Hebrew Thought Compared with Greek*, trans. Jules Moreau (London: S.C.M. Press, 1960); *passim*.

37 W. H. Auden, "Words," in *Collected Shorter Poems* (New York: Random House, 1966), 320.

38 Boman, *Hebrew Thought*, 65.

39 I rely here mainly upon Boman, *Hebrew Thought*; J. Pedersen, *Israel*, I-II (London: Oxford University Press, 1946); James Muilenberg, *The Way of Israel* (New York: Harper Torchbooks, 1965); Henri Frankfort, *Before Philosophy* (Middlesex: Penguin Books, 1951); R. B. Onians, *The Origins of European Thought* (Cambridge: Cambridge University Press, 1951).

40 Boman, *Hebrew Thought*, 65.

41 J. L. Austin, *How to Do Things with Words* (Oxford: Oxford University Press, 1962).

42 *Ibid.*, 4.

43 *Ibid.*, 5.

44 *Ibid.*

45 Boman, *Hebrew Thought*, 66.

46 *Ibid.*, 63.

47 *Ibid.*, 65.

48 Henry George Liddell and Robert Scott, *Greek-English Lexicon* (Oxford: Clarendon Press, 1889).

49 Boman, *Hebrew Thought*, 67; emphasis in original.

50 *Ibid.*; emphasis added. The words quoted by Boman are from Passow.

51 Wittgenstein, *Philosophical Investigations*, paras. 329, 330.

52 Boman, *Hebrew Thought*, 67, 69.

53 See R. B. Onians, *Origins of European Thought*, 76–77, note 9.

54 Obviously I am bypassing all of the vexed questions concerning the predication of characteristics of God, in the interest of unpacking the inherent logic of the picture of Yahweh as speaker-actor par excellence.

55 Onians, *Origins of European Thought*, 76–77.

56 The closing speech of the Chorus reads: “You that live in my ancestral Thebes, behold this Oedipus—him who knew the famous riddles and was a man most masterful; not a citizen who did not look with envy on his lot—see him now and see the breakers of misfortune swallow him! Look upon that last day always. Count no mortal happy till he has passed the final limit of his life secure from pain” (Sophocles, *Oedipus the King*, trans. David Grene [Chicago: University of Chicago Press, 1942]).

57 One is put in mind here of these words, which appear at the beginning of Wittgenstein’s *Tractatus Logico-Philosophicus*: “The world is everything that is the case. . . . For the totality of facts determines both what is the case, and also all that is not the case. . . . *The facts in logical space are the world*” (propositions I, I.12, I.13; emphasis added).

58 See Michael Foster’s quite extraordinary but largely unknown essays on “Christian Theology and the Modern Science of Nature,” *Mind* 44: 439–66; 45: 1–27.

59 I anticipated this claim and set it forth rather too cryptically in a somewhat primitive version in Langford and Poteat, *Intellect and Hope*, Appendix, 449–55.

VIII

1 To ‘obey’ and to ‘hear’ have a common etymological radical. The Latin *audire* (to hear) is akin to the Greek *aiein*. The Indo-European root is *au-*, the Latin *audire* being an extension. *Obo-*, a prefix meaning “towards” or “facing,” “against,” plus *audire*, later *obedire*, “to obey,” accounts for ‘obedient.’ (Partridge, *Origins*).

2 Rudolph Bultmann and Arthur Weiser, *Faith* (London: Adam and Charles Black, 1961), from Kittel’s *Theologisches Worterbuch Zum Neuen Testament*, 34, 11, 43.

3 St. Augustine, *De Trinitate*, X, x, 14.

4 Michael Polanyi, First Duke Lecture, “The Metaphysical Reach of Science,” unpublished ms., 1964; emphasis added. Hereinafter cited as *Duke*.

5 The question here is: what is the meaning of ‘particular’ in a “universe” in which everything is random—including, presumably, the appearance in time and space of the letters *r*, *a*, *n*, *d*, *o*, *m* in the word (?) random?

IX

1 The irreducibility of this phenomenon is strikingly manifest in the etymology of the language in which we express the fact of our being alive. For example the words ‘tone’ and ‘tonic’ both have common radicals with ‘tension’ and ‘intentional’: ‘tone’ in its use in physiology refers to “the degree of firmness or tension proper to the organs or tissues of the

body in a strong and healthy condition"; and 'tonic' in its use in medicine means "having the property of increasing or restoring the tone or healthy condition of the tissues or organs" (*Oxford English Dictionary*; emphasis added). The inference almost irresistibly suggested by the logic of this etymology is that to be a living mindbody is to possess tonus, intentionality; to be moribund is to want tonicity, tension. It is worth adding parenthetically, to enrich our sense of this, that 'tonic' used in music as a noun means the primary tone of a diatonic scale, a keynote, in short: the tone that gives "life" to the whole scale. I should add here that it is not consciousness that I find to be uniquely or paradigmatically intentional, but rather our integral mindbodily being.

2 Partridge, *Origins*; emphasis added. Our Enlightenment tradition, which in general maligns the past while glorifying the future, tends to make us feel that this intentional relation between what we choose to call the "literal" (true) contemporary use of a word and that word's "past" is philosophically trivial. This I am of course contesting.

3 I am relying in this etymological discursion mainly upon the following sources: *A New English Dictionary on Historical Principles*, better known as the *Oxford English Dictionary* or the *O.E.D.*, Compact Edition (Oxford: Clarendon Press, 1971); Partridge, *Origins*, already cited; and *An Etymological Dictionary of the English Language*, 4th ed., ed. Walter W. Skeat (Oxford: Oxford University Press, 1974; 1st ed. 1879–82).

4 Here I am relying mainly upon Partridge, *Origins*.

5 I owe this poignant and vivid phrase to Walker Percy, *The Message in the Bottle* (New York: Farrar, Straus, Giroux, 1975), 44.

6 The word 'figure' comes from the Latin *figere* (to model in clay, to mold, to form or shape in any plastic material, to fashion or form, and finally to invent, imagine, even to pretend). 'Feigned,' 'feint,' 'figment,' and 'fiction' all derive from the same root (Partridge, *Origins*). In one construction of this, we may say that a figure derives from a figuring in a plastic material as the figure of David derives from Michelangelo's figuring in the marble in which the figure is imprisoned and which through his figuring is set free thereby to appear. What then is the plastic material in which a figure of *speech* is figured? Why, my plastic, ductile mindbodily being in the world together with the plasticity of our mutual native language.

7 Notice that in this very sentence I distinguish between the different intentions I have toward the first and second instances of the locution 'figure of speech' by placing the first in single quotation marks, while using the second straight. Toward the first I have a *critical* stance; the second I dwell in acritically that I may *use* it in the service of making an assertion. No assertorial knot has been tied in the first; in the second, knotted, I have the means for doing something, i.e., *making an assertion* or *using* a word instead of, say, reflectively considering how it might be used.

8 Joseph Church, *Language and the Discovery of Reality* (New York: Vintage Books, 1966), 36.

9 *Ibid.*, 37.

10 *Ibid.*, 38.

11 *Ibid.*, 39.

12 The inspiration for this illustration is from Donald Weismann's *The Visual Arts as*

Human Experience (Englewood Cliffs, N.J.: Prentice-Hall, N.D.), 103ff. He employs it, with many variations, to make a complex point about cohesion, tension, and closure in the visual arts; whereas my use here of only his simplest case serves different though analogous ends.

X

1 *La langue* is the stored-up linguistic inheritance of a speech community to be found in dictionaries, in habits of speech, in tradition, in the linguistic competence possessed by its members. *La langue* is distinguished from *la parole* by Ferdinand de Saussure in order to mark the difference between, on the one hand, the fact that as a native speaker of English I possess, at any moment, a given competence to understand and to make myself understood in English, apprenticed as I am to a *practice*, to what is done “as a rule,” and, on the other, the importantly different fact that on particular occasions I actually exhibit this competence by forming novel but intelligible expressions in English; in short, I perform novel speech-acts that you are able to understand, by relying in turn upon your competence to perform the speech-act of comprehending what I have novelly said.

2 Students of language and logic have found it useful to distinguish between “type sentences” and “token sentences.” Like most such useful distinctions it begins to mislead after a while. The words ‘It is now five P.M., Greenwich mean time’ may be said to be the name of a *type* or class of sentence. Members of this class are *token* sentences any of which could be uttered, truthfully, by any or all speakers of English in the world, whenever it is in fact five P.M., Greenwich mean time. Should anyone actually write down or say out loud anywhere in the world the token sentence ‘It is now five P.M., Greenwich mean time,’ this would be the token utterance of a sentence of the type that could be known by the name *It is now five P.M., Greenwich mean time*.

3 Wittgenstein, *Philosophical Investigations*, para. 241; emphasis in original.

4 Maurice Merleau-Ponty, *Consciousness and the Acquisition of Language*, trans. Hugh Silverman (Evanston, Ill.: Northwestern University Press, 1972), 5–6.

5 Hume and Kant as exemplars of the tradition here provide a striking instance of the way in which the *picture* of what it is we know and how it is we know it leads us to certain ways rather than others of “justifying” and “identifying” knowing. The metaphorical intentionalities of the language in which it is rendered provide the picture.

6 The phrase is Merleau-Ponty’s.

7 See Leonard Bloomfield, *Language* (New York: Holt, Rinehart & Winston, 1933); B. F. Skinner, *Verbal Behavior* (New York: Appleton-Century-Crofts, 1957); Noam Chomsky, *Cartesian Linguistics* (New York: Harper & Row, 1966) and *Language and Mind* (New York: Harcourt, Brace & World, 1968); Charles F. Hockett, *The State of the Art* (The Hague: Mouton, 1970) and *The View from Language* (Athens, Ga.: University of Georgia Press, 1977). The Gifford Lectures for 1971–72 and 1972–73 were devoted to *The Nature of Mind* (Edinburgh: University of Edinburgh Press, 1972) and *The Development of Mind* (1973). These were given by a philosopher, A. J. P. Kenny; a psychologist, H. C. Longuet-Higgins; a philosopher, billed as a theologian, J. R. Lucas; and a biologist, C. H. Waddington. As illuminating as these are, being remarkably free from the ideologies of intellectual disciplines, none of the lectures, nor any of the colloquies following each, proposes to investigate the

nature of “mind” insofar as it is generated out of our mindbodies by the method of reflexively reflecting upon reflection itself—though, to be sure, the old mind-body dualism ubiquitously haunts the discussion. The closest approach to doing what I am attempting to do here is by J. R. Lucas (*Nature of Mind*, 60ff.) when he elegantly argues from Gödel’s theorem to the impossibility of finding any algorithmic model of “mind” to be tenable. He says: “The negative point I’ve made is that some of the characteristic activities of the human mind are autonomous in the sense of not being reducible to, or representable by, purely formal logical or mathematical operations. The positive point that I want to make is certain intimations we have, most typically in moral philosophy, but extending over the whole range of our intellectual activities, about each person being in some way his own originator, his own creator of values” (ibid., 63).

8 Torn, as I am, among the competing claims upon me of common sense, of the inherited “bifurcation of nature” of the philosophic tradition, and the responsibilities of sober philosophic colloquy with a reader, I alternate between regarding what I have just written as a truism not worthy of mention or as an outrage not to be countenanced.

9 James M. Edie, “Foreword” to Merleau-Ponty, *Consciousness and the Acquisition of Language*, xxiv.

XI

1 Church, *Language and the Discovery of Reality*, 49; emphasis in original.

2 Wittgenstein, *Philosophical Investigations*, paras. 19, 23, 341, pp. 174, 226.

3 Ibid., para. 5: “A child uses such primitive forms of language when it learns to talk. Here the teaching of language is not *explanation*; but *training*” (emphasis added); para. 6: “Don’t you understand the call ‘Slab!’ if you act upon it in such-and-such a way?—Doubtless the ostensive teaching helped to bring this about; but only together with a particular *training*” (emphasis added).

4 Ibid., para. 7: “We can also think of the whole process of using words in (2) [the primitive language sketched out in para. 2] as one of those games by means of which children learn their native language. I will call these games ‘language-games’ and will sometimes speak of a primitive language as a language-game. . . . I shall also call the whole, consisting of language and actions into which it is woven, the ‘language-game.’”

5 Chomsky, *Cartesian Linguistics*, 4–5 (emphasis added).

6 George Steiner, *Extraterritorial: Papers on Literature and the Language Revolution* (New York: Atheneum, 1971), 107. See, too, my “George Steiner: The Extraterritorial Critic,” *Soundings* 55, no. 4 (Winter 1972), 421–37.

7 Steiner, *Extraterritorial*, ix.

8 Charles F. Hockett, *The State of the Art* (The Hague: Mouton, 1970).

9 Ibid., 45.

10 I permit myself this rhetorically useful exaggeration even though I do not believe there can be a *pure* practice—practice, that is to say, that is picture-neutral, theory-free.

11 The “facts” that I am claiming to “know” are not like the fact that I know expressed in the sentence ‘I am six feet and three quarters of an inch tall.’ In trying to alert the reader, I

have been using adjectives such as 'radical,' 'given,' 're-reflective,' 'primitive' of these "facts." Both these "facts" and the "knowledge" of them are anterior to reflection and its subject-object language. They stand as background to all the *facts* I know as my mindbodily being in the world stands as ground of all of the particular *actions* that, relying upon it, I may perform.

12 Michael Polanyi, "Life's Irreducible Structures," in *Knowing and Being*, ed. Marjorie Grene (Chicago: University of Chicago Press, 1969), 225.

13 Church, *Language and the Discovery of Reality*, 86–87.

14 These investigations are reported in a collection of essays entitled *Child Alive*, ed. Roger Lewin (Garden City, N.Y.: Anchor Press/Doubleday, 1975).

15 Ibid., 3.

16 Colwyn Trevarthen, "Early Attempts at Speech," *ibid.*, 57–74.

17 Ibid., 61.

18 Ibid., 63.

19 Ibid.

20 Ibid., 65; emphasis added.

21 William Condon, "Speech Makes Babies Move," in Lewin, *Child Alive*, 75–85.

22 Ibid., 75; emphasis added.

23 Ibid. One is reminded here of Merleau-Ponty's observation, arrived at phenomenologically: "Speech defects are thus related to disturbances of the lived body and interpersonal relations. How are we to understand this relationship? It arises because speech and understanding are moments in the unified system of self-other. The substratum of this system is not a pure 'I' (which would never see anything more than an object of its own reflection placed *before* itself), but rather an 'I' endowed with a body [I should say: ". . . but rather a mindbody"] which reveals its thoughts sometimes to attribute them to itself and at other times to impute them to someone else. I accommodate to the other person through my language and my body. Even the distance which the normal subject puts between himself and others, as well as the clear distinction between speaking and listening, are modalities of the system of embodied subjects. . . . As an embodied subject I am exposed to the other person, just as he is to me, and I identify myself with the person speaking before me" (*The Prose of the World*, 18).

24 Condon, 81–82.

25 Ibid., 83–85.

XII

1 I have here capitalized 'Reality' for the first time and this in order to preserve for the reader a sense of the logical heterogeneity of its uses when it refers to the everyday reality between men and when it refers to the very *arché* of all realities, itself *not* a reality, being the background of all reflection, the unique Being the nonexistence of which is inconceivable: namely, our tonic mindbodies.

2 Merleau-Ponty, *The Primacy of Perception*, trans. James M. Edie (Evanston, Ill.: Northwestern University Press, 1964), 136; emphasis in original.

I Wittgenstein says: "At the foundation of well-founded belief lies belief that is not founded" (*On Certainty*, 253). The fundamental believings and evaluations that I have undertaken to ground, as tacit, in the unreflecting intentional mindbody, Wittgenstein would ground in a practice, in a training, in a "form of life" to which we each are affiliated by the mere fact of our sentience, motility, and orientation within a convivial order. He says: "'But mathematical truth is independent of whether human beings know it or not!'—Certainly, the propositions 'Human beings believe that twice two is four' and 'Twice two is four' do not mean the same. The latter is a mathematical proposition; the other, if it makes sense at all, may perhaps mean: human beings have *arrived* at the mathematical proposition. The two propositions have entirely different *uses*.—But what would *this* mean: 'Even though everybody believed that twice two was five it would still be four?'—For what would it be like for everybody to believe that?—Well, I could imagine, for instance, that people had a different calculus, or a technique which we should not call 'calculating.' But would it be *wrong*? (Is a coronation *wrong*? To beings different from ourselves it might look extremely odd)" (*Philosophical Investigations*, 226–27). In other words, $2 + 2 = 4$: saying this and believing this—and learning how to calculate with these tokens—are all parts of a "form of life," just as is a coronation.

XIV

I Walter Ong, *Rhetoric, Romance, and Technology* (Ithaca and London: Cornell University Press, 1971), 4.

2 Chaim Perelman and Mme. Lucie Olbrechts-Tyteca, "The New Rhetoric," trans. from *Traité de l'argumentation* by Francis Sullivan and included in *The Idea of Justice and the Problem of Argument*, trans. John Petrie (New York: Humanities Press, 1963).

3 *Ibid.*, 134.

4 Chaim Perelman and Lucie Olbrechts-Tyteca, *The New Rhetoric*, trans. John Wilkinson and Percell Weaver (Notre Dame, Ind.: University of Notre Dame Press, 1969).

5 *Ibid.*, 4; emphasis in original.

6 Wittgenstein, *Philosophical Investigations*, para. 437. "A wish seems already to know what will or would satisfy it; a proposition, a thought, what makes it true—even when that thing is not there at all! Whence this *determining* of what is not yet there? This despotic demand? ('The hardness of the logical must.')

In my view (and I believe in that of Wittgenstein) there is no such thing as a "hard logical must." The "necessity" upon which we rely in practice is just as "hard" as it *could* be—certainly as it need be. "Logical necessity" acquires its so-called hardness only in our second-order account in which, abstracted from the lively oral-aural reciprocity wherein its meaning and force is in its use, it comes to be depicted as inhering instead in the "eternal" relations that in this picture are thought to hold among the terms standing in a finite text.

7 *Ibid.*, para. 242.

8 *Ibid.*; emphasis in original.

9 G. J. Warnock, "Reason," *Encyclopedia of Philosophy*, ed. Paul Edwards (New York: Macmillan Publishing Co. and Free Press, 1967) 7: 84.

10 In contrasting his own way of appropriating their fundamental discovery with that of the gestaltists' way, Polanyi says: "Gestalt psychology has demonstrated that we may know a physiognomy by integrating our awareness of its particulars without being able to identify these particulars, and my analysis of knowledge is closely linked to this discovery of Gestalt psychology. But I shall attend to aspects of Gestalt which have been hitherto neglected. Gestalt psychology has assumed that perception of a physiognomy (perception of a totality or whole by relying upon the particulars which jointly comprise and mean that whole) takes place through the spontaneous equilibration of its particulars impressed on the retina or on the brain. However, I am looking at Gestalt, on the contrary, as the outcome of an *active shaping of experience performed in the pursuit of knowledge*. . . . The structure of Gestalt is then recast into a logic of tacit thought, *and this changes the range and perspective of the whole subject*. The highest forms of integration loom largest now. These are manifested in the tacit power of scientific and artistic genius" (*T.D.*, 6; emphasis added). One is put in mind by these words of a passage in *Personal Knowledge*, upon which I have earlier commented: "Perception is manifestly an *activity* which seeks to satisfy standards which it sets to itself. The muscles of the eye adjust the thickness of its lens, so as to produce the sharpest possible retinal image of the object on which the viewer's attention is directed, and the eye presents to him as correct the picture of the object seen in this way. This effort *anticipates the manner in which we strive for understanding* and satisfy our desire for it, *by seeking to frame conceptions of the greatest possible clarity*" (*P.K.*, 96; emphasis added). Whether one takes the more restricted views of gestalt psychology with its representation of perception over against its atomistically inclined opponents or Polanyi's more comprehensive application of their findings, the key phrases, whether applied to our acts of perceiving or to those of our knowing, are 'irreducibly dynamic,' hence 'tensive' and 'temporal.' Polanyi's expansion of the application of gestalt theory completely, though subtly, changes the whole economy of concepts. Biochemical equilibration is obviously still involved. However it is now conceptually and ontologically situated in the context of the tonic and ultimately *personal* mindbody. The outcome of the dynamic process of *perception* is governed fundamentally by an active, shaping experience, performed by the more fully and obviously realized *person*, in the pursuit of *knowledge*, moved by intellectual passions.

11 Straus, *Phenomenological Psychology*, 14; emphasis added.

12 Recall that I believe that for beings like ourselves inextricably caught up in language and reflection there is no such thing as *pure* practice.

13 See Francis Crick, *Of Molecules and Men* (Seattle, Wash.: University of Washington Press, 1966).

XV

1 Walter Ong, *The Presence of the Word* (New Haven: Yale University Press, 1967), 40.

2 *Ibid.*, 42.

3 *Ibid.*, 9.

4 *Ibid.*, 6.

5 *Ibid.*, 40.

1 Donald Wesling, "Difficulties of the Bardic: Literature and the Human Voice." Inaugural lecture delivered at the University of California, San Diego, May 21, 1980.

2 To be sure, all our lives long we reenact in every novel feat of comprehension, borne on the heuristic vectors of our oriented mindbodies, this movement from the indeterminate as yet unreflected toward what we come more or less determinately to know. And although this phenomenon could not be *lucidly* known in itself, it is one nevertheless the knowledge of and reliance upon which we could never be wholly innocent of without becoming imbeciles.

Index of Names

- Achilles, 122
 Aeschylus, 120
 Alberti, Leon Batista, 58
 Anaximander, 123
 Arendt, Hannah, 2
 Aristotle, 103, 158, 237
 Auden, Wystan Hugh, 116
 Augustine, Saint, 67, 72, 140, 188
 Austin, J. L., 117, 120
- Bach, Johann Sebastian, 74, 75, 79, 91, 97, 106, 129, 199, 202, 205, 260
 Barrett, William, 127
 Bloomfield, Leonard, 175
 Boisacq, Émile, 120
 Boman, Thorlief, 116, 120, 121
 Brahms, Johannes, 75
- Camus, Albert, 5
 Cézanne, Paul, 59
 Chaytor, H. J., 109
 Chomsky, Noam, 175; endorses a new and more sophisticated mind/body dualism, 178; his theory of language-learning Cartesian and intellectualistic, 181; George Steiner's commentary upon, 181–82; anti-theoretical theories of B. F. Skinner and, hold us in thrall because of picture we both *have* and are *in the midst of*, 182, 197; distinction between linguistic competence and performance of, 182, 194, 203; Chomskyan speaker-hearer neither speaks nor hears, 203
 Chopin, Frederick, 75
 Church, Joseph: two kinds of perception according to, 178; an analysis of "reading Church," 183–86; the passage from, turned back upon itself, 186, 190; on language-acquiring child, 194
 Condon, William, 195–96
 Copernicus, Nicholas, 58–59, 144, 206, 207, 209, 216, 224, 232, 233
 Crick, Francis, 249
- Delacroix, Eugène, 75
 Descartes, René: consolidates hopes and drafts program for our sensibility in his *Discours*, 4; opposed to Pascal in conception of reason, 6; picture of inquirer's way of being in world formed by, 12; imagined he had set forth rules of procedure before practice, 28; holds that objective knowledge begins with reflective suspension of antecedents of reflection, 36; implied that *Cogito's* relation to a particular body in the world merely contingent, 46; thought of, scarcely imaginable apart from his artistic precursors, 58; contemplating his body from within picture of himself as discarnate *Cogito*, 59; *Discours* of, did not surface ex nihilo, 165, 206, 238
 Dostoyevski, Fyodor, 5
 Duhem, Pierre, 112

- Edie, James, 176
 Einstein, Albert, 40, 207, 209, 233
 Eros, 122
 Evans, Sir Arthur, 1
- Faulkner, William, 249
- Galileo, Galilei, 106, 144, 207, 224
 Gandz, S., 115
 Ghirlandaio, Domenico, 58
 Giotto di Bandone, 58, 105, 106, 206
 God, 58, 59, 74, 95, 120, 128
 Goody, Jack, 110, 112, 113, 115
- Handel, George Frederick, 86
 Heraclitus, 123
 Herodotus, 120
 Hockett, Charles F., 175, 182
 Homer, 1, 120, 121
 Hubley, Penelope, 195
 Hume, David, 59, 60, 143, 174–75, 204
- Ihde, Don, 110
 Isaiah, 103
- Jaeger, Werner, 1
 Jonas, Hans: on the “nobility of sight,” 58; distinctions between eternity and time, essence and existence, being and becoming arise from experience of seeing according to, 58; characterizes uniqueness of sight, 106, 110
- Kant, Immanuel: rationalism and positivism joined in thought of, 142; influence of, rests heavily upon the *Critique of Pure Reason*, 143; accounts of “experience” of Hume and, are static, 174–75; epistemological subject of, has no body with a place in the world, 174–75; the mind-body is eliminated from Cartesian picture and that of, 208; position of the first *Critique* of, which has been the dominant textbook of theory of knowledge, 206, 207, 247, 248
 Keller, Helen, 232
 Kellog, Donald, 40
 Kepler, Johannes, 58, 144, 207, 209, 211, 217, 224, 232, 233
 Kierkegaard, Søren, 2, 75, 268
- Leibniz, Gottfried Wilhelm, 224
 Leonardo da Vinci, 58, 106
 Lewin, Roger, 194
 Liddell, Henry George, 120
- Mach, Ernst, 40, 143, 206, 208, 209, 222, 249
 Marcel, Gabriel, 15
 Masaccio, 58, 106
 Merleau-Ponty, Maurice, 2; comments upon three-dimensional perspective, 59, 105, 163, 176, 200, 206,
 Michaelangelo Buonarroti, 106
 Moustakas, Evangelos, 1, 2, 3, 4; dancing horse of, 3; and his works, 3; in his person, 7; witness to wholeness of being, 7, 10, 173
 Mozart, Wolfgang Amadeus, 15, 76, 80
 Murray, Lynne, 195
- Newton, Eric, 75
 Newton, Isaac, 207, 209, 211, 217, 224, 232, 233
 Nietzsche, Frederick, 5
- Oedipus, 122, 125
 Olbrechts-Tyteca, Lucie, 238
 Ong, Walter J., 238, 251; picture of himself pronouncing and writing, 254–55, 256, 277, 278; Ong’s parallax, 254–55, 257, 264, 273
 Orestes, 4
 Osiander, 207–8, 212, 217, 233
- Pascal, Blaise, 5; opposed to Descartes in conception of reason, 6
 Passow, Franz, 120
 Pelerin (Viator), 58
 Perelman, Chaim, 238–39, 251
 Piaget, Jean, 23, 187
 Picasso, Pablo, 5
 Pindar, 121
 Plato, 1, 103, 108, 120, 140, 142, 237, 246
 Poincaré, Jules Henri, 212
 Polanyi, Michael: his radical criticism of the prepossessions of the Enlightenment, 2; his unwitting feats of conceptual innovation, 8, 11, 13; use of concepts ‘assumption,’ ‘presupposition,’ ‘logic,’ ‘belief,’

- 'valuation,' 'procedure,' 13, 14; his theory of knowing inextricably implicated with a theory of being, 15, 24, 25, 27, 37, 38; his unwitting conceptual innovations, 41, 96, 98; his model of logic is musical, 99, 131, 133; his views of religion, 134; Yahwist motifs in thought of, 133-41; contra Mach, 143; on hierarchy, 190-91; his method contrasted with mine, 192-93, 204; his polemical target, 209; how does he use 'true'? 211-13, 229; inferences from metaphorical intentionalities of his own language, 245
- Pre-Socratics, 103
- Pseudo-Dionysius, 134
- Ptolemy, 207, 212, 216
- Russell, Bertrand, 100
- Sartre, Jean-Paul, 91, 272
- Schliemann, Heinrich, 1
- Scott, Robert, 120
- Seferis, George, 4, 5
- Skinner, B. F., 175, 178, 193, 197
- Socrates, 122, 237, 246
- Sophists, 237
- Sophocles, 120, 125
- Spengler, Oswald, 112
- Steiner, George, 181-82
- Straus, Erwin, 107, 110, 247
- Trevarthen, Colwyn, 195
- Velasquez, Diego Rodriguez de Silva y, 61
- Warnock, G. J., 243
- Watson, James Dewey, 249
- Watt, Ian, 110, 112, 113, 115
- Whitehead, Alfred North, 1, 114, 253
- Whitman, Cedric, 114
- Wittgenstein, Ludwig, 2, 101, 113, 121, 177-78, 226; "the meaning of a word is its use in the language," 111, 200
- Yahweh, 95, 115; as speaker and actor par excellence, 116; transcends the very words by which he makes the world appear, 122, 123; as the paradigmatic speaker, 127; his identity as faithfulness, 128; his absolute contingency not absolute randomness, 129, 132; the paradoxical Yahwist image of God, 144

Subject Index

With some entries in the subject index I have, for brevity's sake, combined cognate concepts, e.g., Necessary/necessity, Pretension/retention. I have added concepts in parentheses to amplify the meaning of some entries. These are distinguished from cross-references.

Absolute contingency (*see also* Relative contingency, Necessary/necessity): and relative contingency, 84–88; as the radically underivable, motifless, meaningless happening, 91; as radical *other-than*, 91; aleatory music as model of, 92; cannot be coherently thought, 92; the speech act is instance of, 92, 93–96; two qualified senses of, 96; is not mere randomness, 127

Anteriority: temporal, and logical, not reducible to one another, 35

Assume(s): etymology of, 14, n.4; to, as to rely upon, to take as one's own, 14; to, as relying in one's mindbodily being upon metaphorical intentionalities of one's language, 14

Assumption(s): muscles make, 17; an, may be thought of as residing in a mind, in a mindbody or in a body, 24; Polanyi's use of, and 'presupposition,' 'belief,' 'valuation,' etc., give them different range of logical efficacy, 27; the, made by my mindbody are rapidly and subtly altered, 31; may be used to characterize the disposition of a mindbody, 31; if the mindbody can make, it can know and believe, 32

Belief(s): scientific inquiry shaped by substantial, about nature of things, 11,

12; ethos of Enlightenment demands freedom from or lucidity about, 11; substantial, of which we are unaware but which guide inquiry, 12; Cartesian Enlightenment depicts inquirer as divested of all previous, 12; rules of procedure and scientific, and valuations mutually determined, 28; philosophic tradition construes, as articulated affirmations, 28; and valuations as joint premises of scientific inquiry, 29; and valuations embodied in mindbody of inquirer, 30

Cartesian: vicissitudes of anti-Cartesian critic of Cartesianism, 251; defined, 252; dichotomy proposed by Jean-Paul Sartre, 253; myth of the heaven-sent origins of language, 274, 275

Cartesian Enlightenment: depicts our mindbodily being in the world as if we were incarnate minds, 36

Cartesianism: rooted in shift of our sensorium occasioned by transition from oral to print culture, 252; and positivistic infelicities, 252; is first and fundamentally not articulated philosophical doctrines, but a *picture*, 252; is older than Descartes, 252; our subscription to, only tacit, 254; quite generally in this culture we drift into, 262; this culture prepossessioned toward the dualism of, 263; our

common sense reflections indirectly subject to, 267

Copernicus: innovations of, scarcely imaginable apart from artistic precursors, 58; stands to orbital paths of planets as God stands to creation, 58; attenuates intentional bonds to immediacies of world as did Giotto's linear perspective, 58

Direct (*see also* Literal, cf. Figurative): "these words get a grip upon my mind-body" is, speech, 185; whence the authority of, and nonfigurative uses, 268; the, meaning of space expressions authorized in speech-act, 268

Enlightenment (*see also* Cartesianism, Cartesian Enlightenment): picture of inquirer, 2; architectonics of learned inquiry erected upon, 2; Renaissance, Reform, and, 2, 4, 7; *Personal Knowledge* as radical criticism of the prepossessions of, 2; dessication of spirit wrought by, 6; complacency a characteristic product of, 7; question about fundamental beliefs odd-appearing in the ethos of, 11; picture of inquirer's way of being in the world is classically formulated for, by Descartes' *Discours*, 12; in the, picture knowledge begins with suspension of all antecedents of reflection, 36; tends to subject concepts 'form,' 'order,' 'whole,' 'meaning,' etc., to logic of visual picture, 78; the illusion of, that we enjoy a lucid relation to our system of implicit beliefs, 113; our, anxieties, 228

Explicit (cf. Tacit): the tacit components of a feat of, knowing issuing from skeptical inquiry cannot itself be explicitly known in that skeptical inquiry, 20; the logical relation of antecedent and consequent is one in which both terms are, 199

Figurative (cf. Direct): the "figure of speech" that is logical bedrock is not a figure of speech, 153; too neat distinction between literal and, meanings, 159; a common *arché* in which inheres logic governing direct and nonfigurative uses of space expressions and that governing indirect and, ones, 268

Finite text (*see also* Language realism): literacy makes a culture's beliefs an explicit system, 112; literacy provides image of world as immutable, with all accessible as first and last page of book, 113–14, 125, 141; seems more substantial than mere felicities embodied in social usage, 118; theory of meaning gives rise to classic conception of logic, 125; theory permits only relative contingencies, 125; language realism the, theory of way meaning is authorized and secured, 160

Form: whole and meaning as they appear in reflection presuppose themselves prereflectively, 174, 283; wholeness and meaning are the very existential modalities of our being in the world, 188; order, meaning, sense and logic portended in natural gestalt of our intentional mind-bodies, 239

Form of life, 178

Fundamental words (e.g., cause, form, gestalt, integrity, meaning, motive, order, reason, whole): serve to state or allude to the ubiquitous, rudimentary fact and differing forms of the connectedness of things, 51, 90, 96, 174; how differently do they function when subject to picture of seeing and to that of hearing, 51–52, 56, 71, 90, 130–31, 144–45; 'cause' when subject to picture of sight, 90; capable of being subject to musical or speech-act model, 90; in light of visual and audial models, 144–46

Gesture(s): continuities and discontinuities between sentient movement, 172; and logic and mathematics connatural, 172; thought in philosophic tradition to be derivative, 172; as mere supplement to articulate speech, 172–73; what is common *logos* of what I say and the, I use, 173; relations of words and, intrinsic and connatural, 173; sentient movement, and verbal language, even mathematics and logic, are connatural, 198; visible but silent, invisible but sounding words as expressions of our mindbodies, 281–82; my owned words and, make their appearance in space of speech, 281; both words

and, are connatural with mindbody, 281; I body forth meanings through visible but silent, and audible but unseen words of speech, 281; the analogies between mute, and audible speech, 282; communication in mindbody between nascent speaking and nascent, 282; a latent *logos* common to, and speech rooted in mindbody, 283; the deaf body forth their meanings in a way hardly distinguishable from, 284; speech and, are so essentially connatural that we move with ingenuous ease from one to the other, 286; co-linguistic, are on logical all-fours with words, 287; the language of, 290

Greek(s): ideal of limits, 5; for, the primordial metaphor for reality was the word, *logos*, 104, 114; the, diverge from Hebrews, 104, 107, 114; *logos* of, subject to picture of large but finite text, 110, 113, 114, 125; society of sixth century first to be literate, 110; definitions of, *logos*, 120; paradigmatic speaker absent from, picture, 121; contrast between, view and Hebrew view, 124; drew their metaphors from regularities in natural world, 123; science vs. modern Western science, 130; philosophy antecedent of Western rationalism, 130

Hearing (cf. Seeing): contrasting pictures in our descriptions of seeing and of, 56; conception of the world derived from fundamental words when governed by our picture of seeing different from that of, 51–52, 56; a phenomenology of experience of, 63; my autonomy vis-à-vis, different from that vis-à-vis seeing, 64; analysis of, of musical notes, 67; human speech and music as models of, and the heard, 67

Hebrew(s): auditory metaphors of our imaginations derive from, 104; for the, the primordial metaphor for reality was the word, *dabhar*, 104, 114; Greeks and, diverge, 104, 107, 114; *dabhar* as metaphor for reality subject to oral-aural reciprocity, 114; culture transmitted orally long after Old Testament was being written, 115; for, *dabhar* was always the

speaking word, 116; an amplification of, model, 119; drew their primordial metaphors from the reality brought into being among men and between men and God by utterance of performatives, 124; Yahweh the paradigmatic speaker for, thought, 126

Indicative mood: is radical, 160; is reflection in reflected modalities of language of the fact that my mindbody is itself in the, 160; is grounded in intentionality of our tonic mindbodies, 160

Language: as our first formal system, 9; the sinews of our, and the sinews of our bodies, 9, 42, 279; meaning, semantic and metaphorical intentionality of, 9; pre-formed in prelingual mindbodily being, 9; the temporality and intentionality of our mindbodily being lies hidden in the tendons of our, 73; temporal *arché* in the sinews of our, 73; already here when we arrive as *la langue*, 161; two pictures of our relation to, 163; is structured *upon* and therefore structured like our mindbodies, 176; Skinner and Chomsky on language-acquisition, 178–82; granted its full autonomy by Chomsky, 178; analogizing the ground of our language-acquiring capacity, 179; the regnant picture of the language-learning process, 180; use of, the apex of our intellectual, as opposed to our integral mindbodily, powers, 180; thought to be “inside the head” as innate ideas, 194; verbal, connatural with sentient movement and gesture, 198; in print alienates us from its dependence on our intentional mindbodies, 203; single proposition presupposes, speech-community and ambient landscape of *la langue*, 214; all, derives from and remains parasitical upon our rootedness in world, 220; we use was not cribbed from an external text, 242; language use as man’s singularity, 258; all expressions of our mindbodies have dynamically spatiotemporal self-other-world texture, 279

Language-game: ‘logical necessity’ relative to context of form of life or, 241; in any

given, all expressions equally direct and nonfigurative, 270

Language realism: or the large but finite text theory of the authorization of language, 160; 'privileged language' has different use when, is challenged, 161; gravitational pull of, 162; has a picture giving a definitive text which exists independent of our use, 164

Langue, la (cf. *la Parole*): characterized, 161, 310 n.1; an institution: ancient, formidable, with great power, 161; the at-hand resources of, 166; distinction between, and *la parole* must not become dichotomy, 163; as ambient landscape of speakers, 214; the tension between *la parole* and, source of aspect-whole distinction, 218

Literal (see also Direct, cf. Figurative): etymology of, 159; opposition between, and metaphorical is itself figurative, 163–64; as emphatic to add assertorial force, 159; only a metaphorical meaning of, 164; a new angle of vision on, 166

Logic: the articulated form of the making sense of things, 9; there is a, to the body, 17; analogies between, of a skill and, of a proposition, 37; model of, in Polanyi's imagination, 99; the etymological ground of a post-critical, 220

Logical: my own mindbody is the ultimate, ground for me, 21; the strict sense of 'logical,' 'anterior,' 'prior,' 'derivative,' and 'being implied,' 70; concepts used in unaccustomed ways by Polanyi, 70; premises of factuality, 32; intentional unfolding of our mindbodies is, relation, 98; relation between tacit believings and later explicit believings is, 99; Polanyi's heterodox use of, terms, 99; the tacit is, ground of explicit, explicit, derivative of tacit, 100; there can be a, relation between things in time without entailing finite possibilities, 129; connection between the tacit and explicit cannot be expressed in a formalism, 199; the, necessity of the logically necessary, 239; "the hardness of the, must," 240

Logical notation: suited to expressing the atemporal, "transcendentally deduced"

relations of elements of knowledge as accomplished fact, 20

Logical relation(s): components of a motor skill stand in, with one another, 17; discourse about, out of focus in *Personal Knowledge*, 70; must a, be strictly an atemporal, eternal one? 70

Logos: the Greek word for 'word,' a primordial metaphor for reality, 104, 114; the divergence between the logic of, and that of *dabhar*, 104, 107, 114; etymology of, 120; cosmic, breathed in with air we breathe in speaking, 123; becomes disaffiliated from 'story,' narrative, 124; the common, obtaining between what I say and the gestures I use, 173; the autonomous, of our orality, 259; common to speech and print makes translation possible, 262; common to nascent speaking and gesturing becomes patent in acts of writing, speaking, gesturing, 282; nascent gestures communicate with nascent speech through common *logos*, 283; a challenge to the *mythos-logos* distinction, 284

Mathematics/mathematical: critical philosophy took, and formal logic as paradigms for the "hanging togetherness" of things, 9; the ultimate achievement of our powers of abstraction, 9; as a paradigm leads us to discarnate picture of ourselves, 10; formal logic and, as languages, 166–72; seventeenth-century confidence in bearing of, upon reality, 224; conceived as system of empty tautologies without ontological reach, 224; without intellectual passions conceptions of, would dissolve, 225; positivistically induced skepticism over foundations of, 225; system of formal premises of, cannot just hang in mid-air, 226; living science of, research as embodied in living mathematician, 226; "language did not emerge from some kind of ratiocination"—nor did mathematics, 226; program to axiomatize, doomed to failure, 227; proving theories of logic and, while accepting premises without any grounds, 228; intellectual beauty of, betokens reality of its conceptions, 230; natural languages, formal

- logic, and, as reflective instruments, 244
- Mean: we always, what we say, 269
- Meaning(s) (*see also* Surplus of meaning): inquiry into, within concretely actual mindbody, 22; in reflection presupposes itself prereflectively, 174, 188; form, whole, and, as they appear in reflection presuppose themselves prereflectively, 174, 188; moves like music through our mindbodily integrity, 204; as focally apprehended, alludes to range of other, 215; mindbody as radix of all, and meaning-discernment, 262
- Meaning-discernment: our heuristic powers of, 39; ground and radix of meaning and, 262
- Metaphor(s) (*see also* Figurative, cf. Direct): what is meaning of, in 'metaphorical intentionalities,' 149; etymology of, 149–50; is definition of, as "figure of speech" a figure of speech? 152; the root, for, are buried in the etymology of our language, 154; lie deeper than speech, 154; it is, that entone our existence, 155; prelingual, visual, and audial, 156; relation of ordinary use of, to its use in *Meditations*, 158; a new angle of vision upon, 166
- Metaphorical intentionalities, 13; of our speech, 15; there is always a picture expressed through, 27; exegesis of meaning of, 147; and etymology of 'intentional,' 147–49, 151; how do, perform the function claimed for them, 151, 153–54; are vectors of our modes of being mindbodily in the world, 154–55; my mindbody is through and through, 155; by means of, we express the unreflected entonation of our being in the world, 157; our mindbodies, resonating with, bring forth meaning, 157
- Methodology: my, draws tacitly and explicitly upon the etymology of our language, 23; my methodology goes for what is truly archaic in relations between logico-mathematical and biological self-regulatory systems, 24; an explicit statement of a, is an after-the-fact description of an actual practice, 165
- Mindbodily act: of speaking and writing down words is like stroking a tennis ball, 19
- Mindbody: my own, is an assumption, 16; a more primitive appreciation of meaning for, 22; the biography of, 22; the archaic prejudice of my, 23; my activity of composing what I write is feat of my ductile, 42; my lexicon dwells in my, 42; time of the movements of, 52; we cannot reflect the deep wit of, 53; changing forms and shapes of, 53; the demand of our, for motif is exigent, 71; time as the radix of, 73; the primordial *whence* of, 73; for the tonic, any of its given believings and evaluations *pretend* themselves as explicable and *retrotend* themselves as tacit, 101; how I grasp my, according to variant pictures, 105; our mindbodily being is fundamentally fiduciary, 140; my, is through and through metaphorically intentional, 155; integrates explicit analysis of tennis stroke to own motor acts, 170–72, and the style of language, 173; knows archaic sense of 'wholeness,' 'form,' 'meaning,' 174, 232; language structured upon, 176; "mind" expresses at higher level the integrity of our mindbodies, 176; sundered between Skinner and Chomsky, 178; analogizing the preeminent intellectual power of, 179; incorporates words of text, 185; reading a feat of the integral, 185; words get a grip upon, 185; is actively engaged in every act of integration, comprehension and meaning-discernment, 186; the omnipresent, inalienable, logically necessary matrix of meaning-discernment, 203; indicative mood grounded in the intentionality of, 204; eliminated from Cartesian and Kantian picture, 208; presence of, in his picture of noetic situation makes possible Polanyi's polemic, 209; is the Reality the nonexistence of which is inconceivable, 216; is metaphorically intentional, 231; the, pretends the *figure* it apprehends and *retrotends* itself as *ground*, 232–33; tonic, is omnipresent and inalienable matrix of our acts of meaning-discernment, 245; the *where* and *whence* of my unreflected, vs.

space, 272; pitfall in distinction between my, for me and my, for you, 275; my relation to my, and your relation to it is various, 275; my, for you is not necessarily a reflected entity in the world, 275; my own, is not necessarily for me a reflected entity in the world, 275; as the *whence* of all meaning, 277; the visible gestures of, invisible words of, 281; the, as *the* paradigmatic place, 291; the ground and provenience of space, 291

Motif: temporally ordered configurations *are* and are the manifestations of a, 60–61; an architectural or pictorial, 60; our mindbodily demand for, 71; the, of music vs. the, of a speech-act, 72

Necessary/necessity (*see also* Absolute contingency, Relative contingency): picture of seeing the source of the contrast necessary-contingent, 58, 62; etymology of, 62, 80–81; the contrast between, and contingent, 81–82; repose and, expressible in music only because there is no absolute contingency, 87, 90; senses of, in relation to sight and sound, 90–91; visual picture makes logical relations and, connections atemporal, 240–41; logically, as used in colloquies of philosophic tradition, 241; “soft,” is *real*, in sense derived from analysis of musical case, 241; logical, is context-relative, 241

Parole, la (cf. *la Langue*): characterized, 161, 310 n.1; as speech-acts, 161; distinction between *la langue* and, must not become dichotomy, 163; spirit, and letter (*la langue*) are bonded but oppugnant, 163; spirit, an act of speech, 166; the tension between, and *la langue* source of aspect-whole distinction, 218

Philosophic tradition (*see also* Cartesianism, Enlightenment): has tended to abstract accounts of knowledge from its actual accomplishment in time, 25; ‘rules of procedure’ construed in, 27–28

Picture: usage of, defined, 12, 293 n.2; of an inquirer’s way of being in the world formulated by Enlightenment under drastic revision, 12; Polanyian, closer to the

mark than Cartesian one, 13; logic of alternative, for depicting Polanyi’s relation to his question, 13; an alternative, of inquirer’s way of being in the world in Polanyi’s use of concepts, 14; we simultaneously both *have* and *are in the midst of* a, 15, 19; there is always a, expressed through metaphorical intentionalities, 27; we are immured in the Cartesian Enlightenment’s, of our situation in the world as knowers, 36; a rhythmic and sonic, 43; of seeing vs., of hearing or touching, 43; discovery of, we both *have* and *are in the midst of* by archaeological dig, 50; the, of sight abstracted from actual seeing, 52; the hypertrophy in our imaginations of visual, 52; the, of sight of Western imagination and Renaissance linear perspective, 58; the, of seeing and of hearing which we bear in our imaginations incline us to certain uses of ‘logic,’ ‘logical,’ ‘imply,’ ‘anterior,’ ‘premise,’ 67; *having* the, of linear perspective, contrapuntal and polyphonic music, plans of cities without coming to be *in the midst of them*, 106; I at once *have* and *am in the midst of* a, in virtue of speaking and writing, 150; the bent of, in spoken and written words as metaphorical intentionalities, 151

Place: as I asseverate my words I found a, for both of us in infinity, 268; ground of all articulations of space is a, the archaic, 271; is a *whereon-to-stand*, 271; is a provenience, 271; space presupposes, 271; the difference between, as the *where* and *whence* of my mindbody and *space*, 272; the mindbodily other with whom I share the act of love is close to the paradigmatic, 276; all modes of space are pretended from primordial, and all retortend this self-same, 291

Positivism: rationalism and, joined in Kant, 142; a natural outcome of received construction of *The Critique of Pure Reason*, 143; is abstractly thinkable but a positivistic life unlivable, 205; subverts our confidence in Reality, 205; altogether too incredible to hold our attention, 205; subverts our confidence in the Reality the nonexistence of which is inconceivable,

205; abstracts us from our mindbodies, 207; Copernicus rejects ontological, of Osiander, 207; crypto-positivism of Descartes and Kant, 208; of the Vienna Circle, 208; which is Polanyi's polemical target, 209; resulting from our loss of confidence in archaic Reality the nonexistence of which is inconceivable, 210; Duhem and Poincaré evaluate Ptolemy and Copernicus from point of view of, 212; how could Ernst Mach at once be a, theorist and practicing scientist? 215; Machian, still holds us in thrall, 224; can impeach our sense that conceptions of mathematics are real and its assertions true, 224; not only denies transcendent values, it denies real existence of entities comprehending particulars, 234; Mach's, did not seriously inhibit his first-order scientific practice, 249

Pretend/retrotend: notes with which melody begins, what follows, notes with which it begins, 74; etymology of, 74; my primordial *place*, all modes of being in space and time and, this self-same *place*, 291

Pretension/retrotension: we dwell mindbodily in the, 100; *co-presence* of notes and words in time is *bond* among them in, 265; *co-presence in time* is dynamism within, 265; how do, hold among notes and words? 226; bonds of, abide in coition of my mindbodily being with the world, 266–67; the sounding bonds of, as palpable as mindbody itself, 277; ultimate authority of space and time words grounded in, from and, to my primordial *place*, 291

Read/reading (*see also* Speaking, Writing):

I, as if listening and write as if speaking, 47, 109; word as written vs. spoken and heard, 109; my relation to my own words as being written is more pathic than to my own words as, 109; and comprehending is a virtual integral mindbodily incorporation, 184; an analysis of, Church's text, 183–86

reality: is, itself subject to a finite set of possibilities? 101–2; agnosticism about, in received view of Kant, 143; is sur-

prising—cannot be comprehended, 143; theories have power to disclose, not imagined by their authors, 144; Copernicus' belief in the, of heliocentric system, 144; the, that appears within our convivial acts of speech disciplines and constrains, 161; the anticipatory powers of a map opens our eyes to, 212; a statement about nature believed to disclose an aspect of, 213; single true proposition alludes to indeterminate, beyond itself, 214; single proposition insofar as true and insofar as possessed of surplus of meaning discloses unanticipated, 214; the *ground* of our belief that mathematics bears upon, is the fact that we *do* believe it, 228–29; intellectual beauty betokens a, pregnant with inexhaustible power to manifest itself, 231; we rely upon mute axioms of significance to reach out to, 233; is intellectual beauty an infallible guide to, 233; *Reality* guarantor that theories bear upon, 233–34

Reality/Being: as *arché* of all realities, not itself a reality, 205, 312 n.1; as the unique being the nonexistence of which is inconceivable, 205; is archaic, 205; is an absolute by reference to which we conceive relativities, 205; by relying upon which we are moved to seek a substantiality commensurate with itself, 205; positivism subverts our confidence in, 205; has disappeared from the picture we both *have* and are *in the midst of*, 205, 207; all our acts of indication arise and derive their warrant from, 205, 207; Copernicus had no loss of confidence in, 207; sense of, moves us to trust in availability of realities complementary to itself, 209; the renunciation of underived, of oneself a worldwide climate of opinion, 217; the intentional mindbody in its world is, the nonexistence of which is inconceivable, 221; our acts of indication derive their warrant from, 221

Reason (*see also* Theoretical reason): Greeks neither carried, to extremes nor negated it, 5; Descartes and Pascal opposed in conception of human, 6; denial that, is incarnate is made in picture we *have* and are *in*

the midst of, 246; distinction between, brought to bear upon a practical outcome and its function in solution of abstract problems, 247; the superordination of theoretical, in Kant's first *Critique*, 247; tacitly informing all our doings vs. explicitly governing all our considerings, 247–48; only, that is formalized is, 248; the practical consequences of sharp dichotomization of theoretical and practical, 248

Reflection: how is, accomplished, what are our reflective instruments? 11

Relative contingency (*see also* Absolute contingency, Necessary/necessity): of notes in Bach's First Prelude allows for dynamism quite absent from picture of seeing, 82–83; a sense of, illustrated by Bach's First Prelude, 84; and absolute contingency contrasted, 84–88; speech act exhibits both, and absolute contingency, 96–97

Retrotend (*see also* Pretend/retrotend), 74

Retrotension (*see also* Pretension/retrotension), 74

Rules of procedure: there are some, of which we are unaware, 12; our awareness of some, achieved only after productive inquiry, 12; Enlightenment believed all inquiry armed before the fact with, 12, 28; how can unreflected, direct the course of a lucid inquiry? 12; Polanyi's innovations with, 40; the logical range of, may be usefully enlarged, 41; before there can be, there must be practice and then a practice, 40

Seeing (cf. Hearing): contrasting pictures in our descriptions of, and of hearing, 56; conception of world derived from fundamental words when governed by our picture of, different from that derived from picture of hearing, 56; imagination of West superordinates picture of, over picture of hearing, 58–60; the birthplace of idea of infinity, 58; perspectival painting in Renaissance a source of our picture of, 58; causality becomes problematic when interpreted through picture of, 60; actual, is enmeshed in temporal thickness of our

mindbodily being, 61; 'necessity' derives from our picture of, 62; an analysis of hearing in contrast to one of, 62; the unique power of, 56–57, 78; particulars in our picture of sight are arrayed in an instant without temporal thickness, 64–65; essence of objects of, is static, 79; Hans Jonas' analysis of, 106; the "hardness of the logical must" derives from superordination of our picture of, 240–41

Sight: the unique power of, 52–53, 61, 65; essence of objects of, is static, 79; presents us with a mere slice of dead (visual) space, 79

Space: as that within which particulars are simultaneously co-present to vision, 57; my relative autonomy *vis-à-vis* objects in (visual), 64; particulars in (visual), are finite, static and eternal, 65; the *Augenblick* is really a thin slice of dead (visual), 66; notes in heard melody can have no relation in (visual), 67; without primordial *whence* there could be no, or time, 73; in our picture of vision particulars are sensually simultaneously co-present in (visual), 75; the power of sight is to sense in an instant an eternal configuration in (visual), 78; relations of particulars in dead slice of (visual), are necessary, 79; different forms of, according to E. Straus, 107; the contribution of literacy to formation of our picture of seeing and, 109–10; the printed word exists in a dead slice of (visual), 110; modern Western common sense view of, 267; indirect and figurative uses of, expressions, 268; I take my stand in space expressions affiliated with my having a place, 268; the word, does not only have one use, 271; the, of speech's appearance, 279; the phenomenon of contracted, 280; is, of speech's appearance a mere figure? 280; words occupy the, of their appearance as directly and discernibly as can be, 281; all modes of, are pretended from primordial place and all retrotend this self-same place, 291

Speaking (*see also* Speech, Speech-act): when I am, or writing thoughtfully I am also picturing to myself, 254; a, as causing words to come into being through time,

258; as the sounding of a sentence, 258; not comprised of grammatically complete sentences, 258–59; in thoughtful, thinking, saying, and meaning are mutually implicated, 285

Speech (*see also* Speaking, Speech-act):

speech-situation governed by necessity and *absolute* contingency, 94; heart of, is radically contingent, absolutely novel, 95; authentic, is act of owning my words before you, 95; “leaves no discernible, direct effect in space,” 256; as substantive, not a gerundival form, 256; too static to be in time, too dynamic to be in (visual) space, 257; exists only when it is passing out of existence, 258; cannot be reduced to actual sounding of a sentence, 258; lively, is not failed or not yet achieved writing, 259; we picture, as a printed text and ourselves as readers, 273; the space where, occurs, 279; the space of speech’s appearance, 280; and gesture connatural in my mindbody, 287

Speech-act (*see also* Speaking, Speech): does not endure in (visual) space, 67; why we do not hear restlessness, tumult, and infinity in, 77; words in, not governed only by sonant qualities, but by syntax, 93; the lively and actual, 94; as motivational, subject to necessity, to suasions of motifs, yet absolutely contingent, 94, 102, 105; actually existent speaker at the center of, 94; in actual, the owning of my words, 95; taking myself up in, 95; constatives as necessary to routine business of, 118; biblical texts as God’s performatives, 119; logic of picture of, as *arché* for reality, 119; world creating, 119; heart of, novel and underivable act of owning words before another, 126; is absolutely contingent, 126; is neither caused nor uncaused, 127; absolutely contingent yet not random, 129; an absolute constituted in actual, 162–63; in, I attend from my language as *ground* to what I say as *figure*, 218; dynamically unfolding in time seems to outrun itself, 270

Spirit: and letter are at once indissolubly bonded and irreducibly oppugnant, 200

Surplus of meaning: precise predictive con-

tent of a theory vs. its, because of its appearance, 212; the, possessed by a map of English towns in contrast to mere list of names, 212; the excess of, of topographical map vs. that of simple map, 213; even a single proposition possesses a, 214; Mach’s assertions about scientific theory themselves cannot be made without, which the theory asserted cannot contain, 215; the theories of Ptolemy and Copernicus, even as mere expressions of celestial timetable, have, 216; truth of theory insofar as having, not reducible to either true *a priori* or true *a posteriori*, 216–17; and the source of the ‘aspect-whole’ distinction, 218; contrasting degrees of, in *American Heritage Dictionary* and Partridge’s *Origins*, 219; increase in heuristic power with increase in, 219

Temporal (*see also* Time): accounts of knowing among timeful knowers must embody their temporality, 25; a representation of human knowledge as the outcome of acknowledging affirmations of actual feats of knowing achieved in time, 25; knowings as proceedings, rooted in, thickness of mindbodies, 30; various senses of time used to describe jogging, 53–56; various senses of time used to describe looking at painting, 57; the, and intentional shape of running style, musical motif and of moral action, 60; we can see motifs only in the, thickness of the world, 60; seeing and, thickness of the world, 61; it takes time in several senses to hear, 66; time in each of several senses in relation to seeing and hearing, 66–67; successiveness intrinsic to music, 68; time is the very radix of our mindbodily being, 73, 188; apart from the temporality of our mindbodies words like ‘tense,’ ‘attend,’ ‘portent’ would have no force, 73, 188; we carry the *arché* about in the sinews of our mindbodies, 73, 188

Theoretical reason (*see also* Reason): highest form of, expressed in mathematics, 246; no less than practical reason implicated with dense temporal warp and woof within which we dwell, 246; etymology

of, 246; analogies of, with practical reason, 247; practical consequences of sharp dichotomization of, and practical reason, 248

Time (*see also* Temporal): the, during which my body unchangingly endures vs. that in which it moves, 53; the, of causal integration not that in which motif and style evolve, 54; stopping the, of causal integration and of motion and of motif, 55; that is hardly distinguished from eternity, 56–57; it takes, in each of several senses to see, 61; through which a tone is distended is a temporal succession, 66; all “times” are derivative from and modulations of radical temporality of our being, 74; there can be a logical relation between things in, without its entailing finite possibilities, 129

Tone, 66

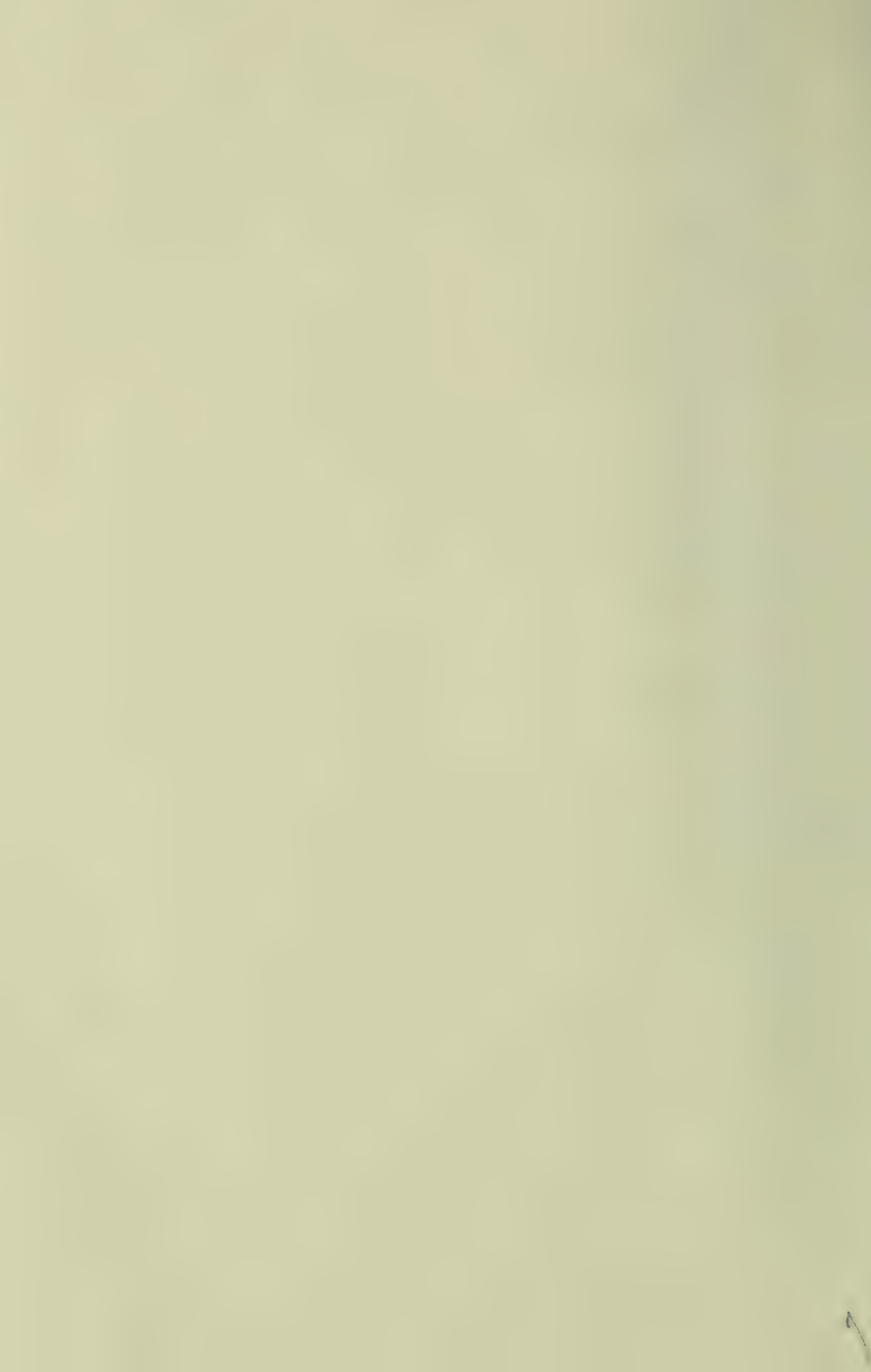
Whence: is the radical ground of all my dis-

criminations and articulations of space, 271; it is within oriented, that primordial spatiality lies, 271; place as *where* and, of unreflected mindbody and *space*, 272

Whole: form, and meaning as they appear in reflection presuppose themselves pre-reflectively, 174, 188

Word(s): the, as audial entity vs. as visual entity, 108; the printed, exists in a dead slice of (visual) space, 110; are vehicles by which intentionality makes its appearance in the world, 149; difference between a culture of the, as printed and of, as spoken, 251

Writing (*see also* Read/reading, Speaking): in our relation to, the gnostic is dominant over the pathic, 108; “the activity of, and reading is infinitely more abstract than that of speaking and hearing,” 112; has a god-like stability, 114; is an act of exploration and conquest, 282



DUKE UNIVERSITY LIBRARIES



0002098430

**DUKE UNIVERSITY
LIBRARY**



**DURHAM, NORTH CAROLINA
27706**



DUKE LSC
D00209843Q



A standard 1D barcode with vertical black bars of varying widths on a white background.